

(18) The night was clear
& cool but in the morning
at daylight there was a
drizzle which disappeared
at 7 P. M., when we broke
camp. The way lead
over rolling hills, some
bare, ~~at~~ but most having
pine trees & grass. The
roadside was lined by
a great variety of bushes
some ~~rose~~ ~~honey~~ roses, others
small medlar pear, others
Amelanchier, some resembling
mangroves & adorned
by red apples others covered
with red Christmas berries
some with blue berries. In
spring this road must
be glorious for miles

white & pink apple like
blossoms. Oak bushes bearing
bunches of acorns & chestnuts
like chinquapins were a
common roadside bushes
On the roofs of many houses
& on gates & clumps grow
themselves this country clumps
of ficus indica cacti
the only cacti seen here
Yesterday we saw a farmer
plowing using a sharp
bladed plow ~~like~~ of
heart-shaped design for his
two rounded paired furrows
frame. Near by his ~~plow~~
were bullocks yoked to
the plow ~~with~~ a pair
of oxen.

nearby his family were
building a house. The
method of making walls
is to dig up planks
the desired width &
then fill in between
with adobe mud mixed
with straw to hold it
together. Two women
& a man were tamping
& tamping on this
earth to wedge it in
tightly. Sun-dried
bricks are often used
also for house walls.
The roofs are ~~clay~~
black clay tiles or else
thatch or earth ~~on~~
On many of the ridges at

8000 or 7000 feet small
fields of buckwheat
were seen in flower,
~~wheat~~ giving a delicate
big pink & white ^{color} effect.

The country generally
has the rolling, pinched
appearance of the mts of
S. California & Mexico
at 5000 feet alt.
in those countries.



There is nothing distin-
ctive in the vegetation
about pueblos & churches.
The cultivated valley
with rice is the only
oriental feature. This
rolling country of Yun-nan
is at a general level of 6300
feet in the valleys with the
ridges 2000 feet higher or 8300 ft.

Kwei-Chow is a similar country ~~rolling~~ without any really high ranges. It is described as gameless by More-Bennett & others who have been thru it. Along the road we have been travelling ~~to~~ we have seen no cat tracks in the soft earth & it is apparently devoid of rodents, carnivores & hoofed animal. The small bird life is abundant & the bush & tree growth in great variety with many fruits & nuts for food.

We reached a broad level valley some 4 miles in width & dotted by many villages. This we crossed & stopped at Yun-nan-yi - a town on the west border. Here we camped in a large old temple on the hillside.

overlooking the plain.
At the entrance to the town
is a fine ornamental bell
tower, quite an unusual
feature in this region.

(19) We decided to camp
here for the day as the
caravan animals were
very tired + sore-backed.
I set 20 rat traps in
the bushes at the temple
+ caught 7 ~~Mus mus~~ ^{Egyptian}
norvegicus on my way.

At 9 AM. I went shooting
with the 2nd into the groves
+ fields near the village.
In the trees I secured
2 tupias. One of these was
high up among about
on the top most branches

of an ash tree much as
a squirrel. The other was
in a similar environment.
Rabbits + squirrels are also
said to occur near the
village. Shot 2 turtle
doves, a sandpiper, + a
pair of jackdaws + a small
raven. A great variety of
small birds were seen here.
bull-bulbs, thrushes, tailor-
birds, drovans, sparrowhawks
kites, warblers etc. The
trees growing on hedges are
a sort of ash with ^{red} berries in
bunches like our pepper trees,
acacias, figs, etc. Day
clear at sunrise but cloudy
at midday.

(20) The night was cool & clear. I caught a new mouse a gray, long-tailed spiny furred one. Also caught a *Tupia* during the day; they apparently do not move about during the night.

We broke camp at Yun-nan at 6:30 just as the sun was rising. The road led thru hills & along small valleys filled with rice & corn fields in about equal proportions. The day was clear but not hot a breeze blowing all day.

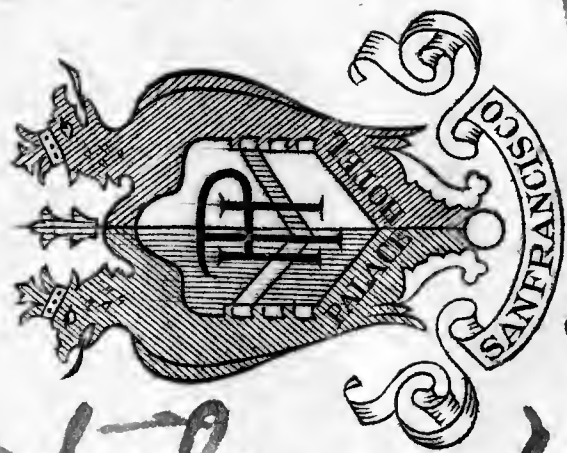
Yesterday when I was hunting a bunch of Chinese boys followed the soldier & I about running along laughing & thoughtless like Caucasians of the same age very different from the doted indifference adult evlies, at noon we

Stopped in a small hill village
+ dined in a small temple
Before reaching this place
we passed by a small lake
in which several fishing
canoes were seen. The shore
in places was planted to
lotus which were in flower,
some white, others pinkish
+ very gorgeous with the
setting of the great circular
leaves. A few grebes were
seen in the lake but no
ducks or shore birds, the season
being too early for them.
~~On~~ On the borders of
one field I saw many
small poppies in flower, a
small creeping sort. Formerly
the main ~~crops~~ was
planted to poppies when
corn is now grown. There is
no serious crime to grow

poppies ~~for~~ opium. In
~~many~~ case of a second offense
the death penalty was
imposed. The fields where
opium are hidden are corn now.

Kingdon Ward has published
a book on Yunnan - now called
the Land of the Blue Poppies
but the flowers are really white or
pink.

We reached Hung-ai



small village
in the center of a

fertile valley of fine black
loam on one of the head
streams of the Red River.

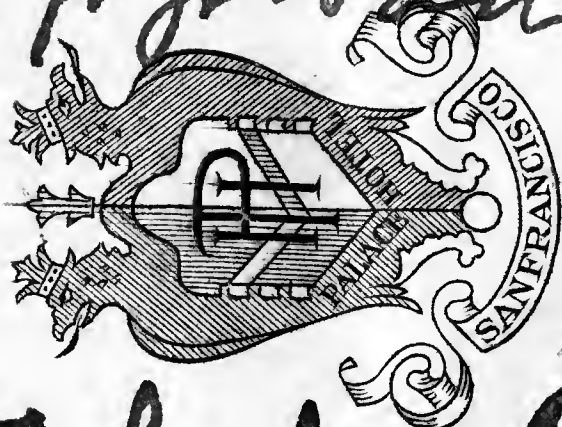
This is the first of the Red

River drainage we have met
all the way from Yunnan - now
being Yunnan but following
closely the watershed of the
Red River. The poppies
have been in the village

During the past few days
are not Chinese at all in
appearance none of them are
slant eyed. Many are very
dark in complexion with
small slant noses & thin
mouths. The women have
ornaments their foreheads
with silver bands & ornaments
in the ears with silver pendants
& filigree. All dress in
indigo blue. As I wrote
a great crowd started out
the temple all blue except a
boy or two in white.

(21) We departed from our
temple at Tung-ai at
sunrise (6 A.M.) in clear cool
weather. Our road climbed
up a steep ravine with
precipitous walls, the summit
about 8,000 feet & the mountain top
10,000 feet. The sides of the ravine

were thickly clothed by green
bushes & trees. At the summit
the pines & oaks were numerous
the pines were a large coned
long leaved species different
from the small coned yellow
pines we have been travelling
by on the road. The pass
presented the nearest
approach to national forest
& wild country
we have encountered.
The brush was very dense
& the hillsides in most
meadows covered by a
variety of flowers. The
method of computing
distance here is by li, a
league being 10 li or 1 hour
travel. Time rather than
actual distance seems to be
the basis of distances as



the league is in Spanish
countries. Our usual
fare on the road has been
boiled chestnuts which
we can buy in the villages
& valmuts. The latter
are as good as our thin
shelled ones at home.
A large form of apple
like quality is also
used by us on the route.
It is very juicy but
must be eaten hard
as when soft like our
pears it is insipid
& disagreeable.

In the pass & well
below it as well I saw
many small aspens
on hill sides. & some small
elders near the creek.

No ^{large} game was seen, the
only mammals being
2 gray squirrels & a
chipmunk. Many of the
birds seen in the pass
were species different
from those of the route
we have followed thus
far. ~~The~~ At the very
summit stands a
few huts & there I saw
a large banana plant
growing, evidence of
absence of frost.

The cornucopia was here
grown in fields, also red
peppers, corn, buckwheat
& taro. ~~Reached~~ at

12:20 P.M. we reached

Chao-Chow & made
camp in an unused
temple inside the
walls. The town is
fairly large & is hidden
behind some hills
from the Tai-lake.

The south gate
thru which we entered
is very picturesque
but weather-beaten
& ancient. The temple
we camped in was
very ornate externally
with colored figures
inside ~~thru~~ the
shrine was red lacquer
& gilt. No gods were in
the temple it being built
by a private citizen master (50)

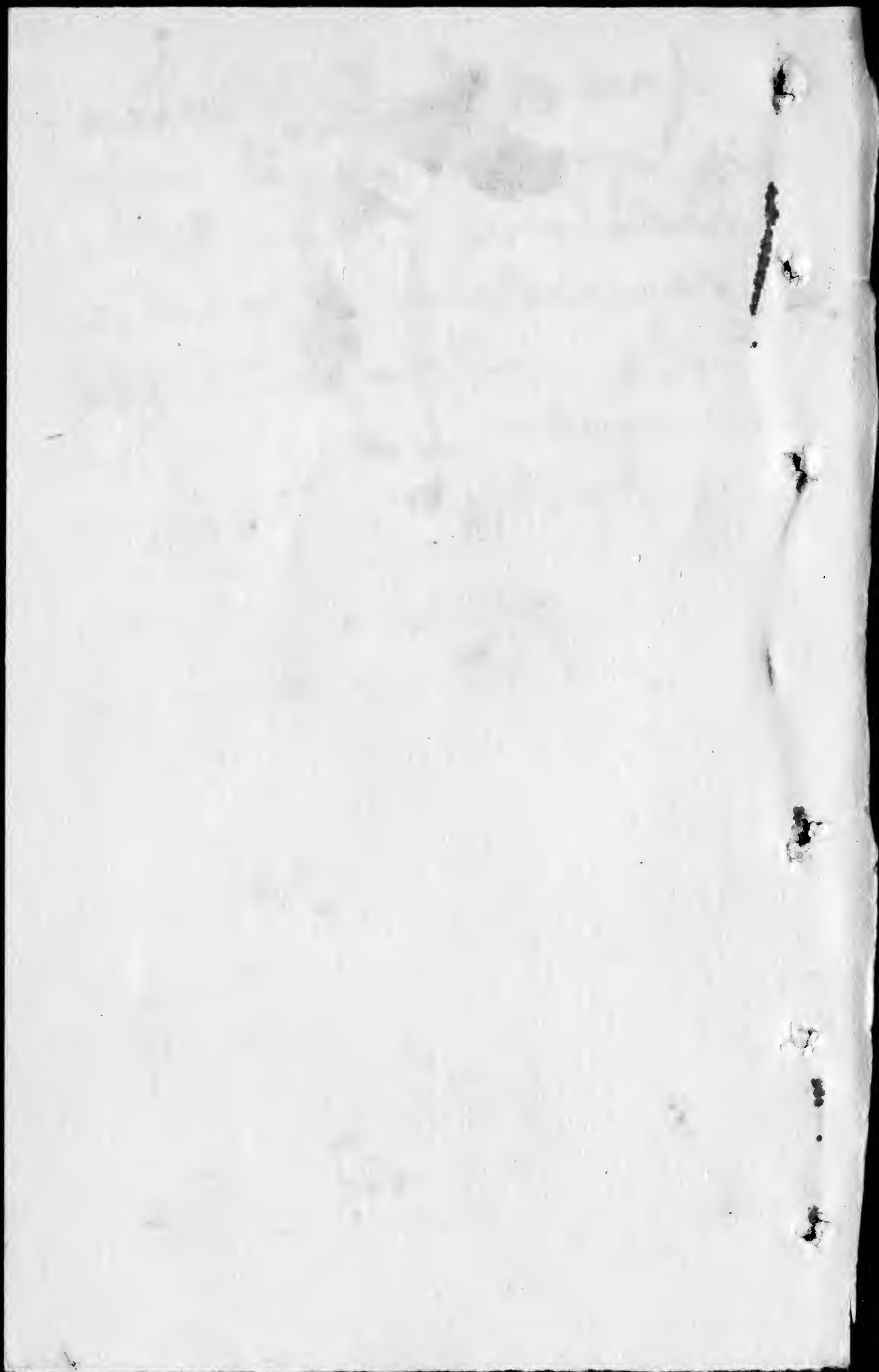
years ago. In the court
of the temple were planted
mulberry trees but now
silk culture is done in
this part of China, the
silk being derived from
the Canton district chiefly.

(22) During the morning
a lot of moving photos
of the roofs packing up
+ camp scenes at the
temple generally, also
some of the whole caravan
passing thru the south
gate. We left at noon
for Tai' - fu, at Sin
Kuan at the south end of
the lake we stopped a few
minutes & had tea with
the salt commissioner.

Chineses of Shantung. After
leaving, Chao-chow we
travelled down the valley
thru solid rice fields &
did not get a view of
Tah-lake until rounding
a hill & starting the
the south shore. The great
summit over 14,000 feet
high was hid in clouds.
Villages hidden partly by
trees were scattered over
the plain bordering the lake
what is the land is planted
to rice. Many streams
flow down from the mts.
on the west side of the lake
& give abundant water
for rice cultivation.
The road runs some
2 miles back from the lake

where the streams run
from whitish granite,
+ granite boulders often
show the landscape.
The east side of the lake
is rounded smooth tree
hills, often barren +
showing red soil. Several
square sailed sampans
were seen sailing on the
lake. The sun at noon
was quite hot & the
reflection off the granite
rocks was quite intense.
We reached Mr. Evans' house
in Talifu at 6 P.M. &
he kindly put us up.
At dinner time the master
a local magistrate who is

fond of shooting came in
& gave us much infor-
mation. Evans talks
mandarin & Cantonese
the interpreter. The
mandarin was very cordial
& happy in his manner
& is a keen sportsman
who knows the region
north of Li. Chuan-
well.



(23) We spent the morning repacking some of our outfit. We brought back from town two large Rhizomys or bamboo rats which we bought from a Chinese. I photographed them in the court. They were very combative whenever they came near one another they bit savagely into each others' bodies. After tiffin we went with Evans + called on the General at his garden nearby. He greeted us cordially + discussed game animals, Tibetan dangers, etc. He served us cigarettes, tea, sliced pears + some granites. Then we called on the local magistrate who visited us last night. His garden was less smaller + dirtier than the General's. He was talking as last night + served us tea, cigarettes, beer + sweet biscuits. In his house he had quite a number of yellow chrysanthemums in bloom. Mr. Hansen the Chinese missionary was the next to receive us. He mentioned

the great abundance of
mushrooms at Tali where the
natives upon request
brought in great numbers.
He hired two boys for
assistants one trained as
a botanist by Forrest a
Scotch Botanist who has
travelled north of Li Chuan.
While we were at Hanchi
we a rain storm passed
before us at 7 P.M. when it
abated. This afternoon we
saw a *Turdus* running
along the roof of the house at
Evans Court. Another was
seen yesterday at Chao Chao
on the roof of the temple in
which we camped.
During our trip across from
Yun-nan - for we bought
numbers of mushrooms of several
sorts which we ate fried &
found them very good. They
were all that looks in shape

(24) The day broke misty
& it remained cloudy all
day.

The chief mandarin or magistrate gave us a dinner in company with Mr. Hanna, Evans, the General, the interpreter & one other Chinese. They were all very jolly at the feast & talked & laughed continually. The affair started at 5 P. M. with cigarettes & then, then followed boiled spaghetti & sweet cakes. After this course we entered the dining room. The mandarin had provided 3 plates with knives & forks for us but the other guests used chopsticks. The food was nearly all boiled & in the form of stews. There were some hot courses. Each course was served in a large ~~hot~~ bowl ~~and~~ placed in the center of the table & everyone dipped their chopsticks in & fished out some food. We had some odd dishes such as stewed sea-cucumber, cuttlefish, sea-weed (green & brown), bamboo-shoots, lined buried eggs.

There were also mushrooms,
chickens, tripe, ham, &
at the finish boiled rice was
served, soy bean sauce was
served in small bowls in
which the guests dipped their
food. As a hors d'oeuvre
we had roasted watermelon
seeds, peanuts, pomegranates
& pears. The liquor consisted
of Rhum white (a colorless
gin or arapandiente 60% alcohol)
this tasted like gasoline & was
served in small cups & bowls.
The Beer & pomegranate juice
were also served. The chief
amusement of the
evening was drinking the
host challenging each guest
in turn. There were two
methods in vogue which were
games of chance but there was no
~~skill~~ escape. One consisted
of calling numbers ~~the same~~
as the ~~the~~ hands of the
two players were thrust out

- The player calling the total of the ~~two hands~~ ^{exposed} fingers on the two hands wins & the loser must drink a glass. This game is played 3 times consecutively with each guest who accepts a challenge. Another form of challenge is played also with the hands ~~of~~ the closed fist being a rock, ~~the~~ the open hand paper & the two fingers spread a scissors. ~~The opponents~~ The scissors wins against the paper which they ^{win} against, the paper wins against the rock which it can wrap up. The rock wins against the scissors. The opponents make the scraps simultaneously as the thrust out their right arms at one another.

- (25) In the morning we went out to the 3 pagodas with boxes to take photos. Mr. Hama entertained us at dinner.
- (26) The day was clear & warm. We repacked much of our outfit and at 4 P.M. attended a dinner.

given by Evans to the Chinese
& the missionaries. It was a
regulation Chinese dinner. Shark
fin was an addition over the
magistrates. The taste was not
distinctive rather gelatinous
& insipid. Other Chinese
dishes were sea-cucumber,
bribe²⁰⁷ bean sauce. The guests
were the Hon. Miss Krentzel,
the ~~young~~ French Padre, the magis-
trate, the general, a major, captain
& lieutenant. We retired at
dark by lantern.

27 Our caravan left Evans'
house at 10 P.M. The day
was clear & hot. The road led
thru rice fields about 4 miles
back from the lake. A few small
villages were passed & many
pack animals & loaded coolies.
Hills of maize, taro, millet
were seen at rare intervals.
Great numbers of herons
were seen in trees & the
plains. Magpies, ravens, &
a minor like the Hawaiian bird

Kites, Sparrow Hawks & Swallows were also seen. The flanks of the great range bordering the lake were strewn with granite rocks & boulders. In places there were wide white alluvial fans where the mountain torrents entered the plain. Much of the lower slopes were dotted thickly by the raised domes of Chinese graves. The top of the range lay hidden in clouds as it has for all the days we have been in Tali-fu. The lower slopes are chiefly grass covered with only a few forests in spots. The higher parts appear thickly bush covered but not forested. We reached a temple near Shang Kuan & camped at 6 P. M. Nearby the lake could be seen about half a mile away. A large rubber tree near the entrance harbored a pair of turpials, one of which I shot. The night was clear & cool.

(28) We arose before daylight & got started at 6:30 A. M. Before leaving

About the lake shore & stream alders
are the common trees

I saw several squirrels in
acacia trees & shot two of them.
Our road followed along the lake
shore thru small villages &
paddy fields. We crossed the
canal or appearance of the lake
on a long stone bridge & then
around thru paddy fields bordered
by willows to the opposite side
of the valley. Here we climbed
the range which was bare of
trees & rocky. The soil was
bright red & the rock formation
the whole way hard gray limestone
boulders of which lay thickly on the
surface. The lake basin is
granite on the west & limestone
on the east which is the low dry
side. The rock formation
accounts for the difference
in topography & also in dryness
& vegetation. On the limestone
there was stunted *Sesuvium*
bushes, vetches, a blue lookspore
& several thorny bushes. The
soil between the gray rocks
was everywhere bright red &
the pools of water red with mud

also. We stopped for lunch
after passing over the range in
a narrow ravine. Here the hills
were covered by a scrub-oak, alders
+ more bushes. From the lunch
place we followed along the
ridge of the ~~same~~ range + then
dropped down to the low valley
where Pei-ya is situated.
We reached this village at
5 P.M. + carved in a delapidated
temple. Before reaching the
village we passed thru a bad
land or garden of the sort
sort of rock formation on
the slopes of the valley. Here
a grayish lava or possibly
limestone formation was much
dissected into columns 15 or
20 feet high. Many of the ~~but~~
columns had large heads like
pestles + the rock were
horizontally bedded. Along
one of the ~~new~~ creeks we
passed the rock was columnar
bedded like basaltic columns.
The rock which I thought was
limestone maybe a sort of igneous

rock as it gives rise to red soil & never weathers white like most limestones altho it has the flinty texture of some limestone.

(29) The night was rather ^{warm} & mosquitos abundant. The 20 net traps caught only 1 rat & a large *Epinomys*. ~~Soon at~~ daybreak it was raining & it continued to rain in showers all day. Soon after leaving camp we passed several channel holes situated in a deep valley. Most of the way lead over rolling or level pine covered mountain tops & plateaus. The trees were yellow pine & fir. They were separated by 30 yards or so & the ground was covered giving them a park like appearance. The country resembled the Sierra Madre forests of Mexico. The San Pedro Martir of Lower California. ~~At~~ No game animal or birds were seen in the forest. Arvicola was seen only in muddy.

- pools at long intervals. We
 met on the way parties of
 coolie men & women carrying
 loads of firewood. They were bronze
 square faced & ruddy cheeked
 & not Chinese in appearance
 to a great extent. At Pai-yu
 in the canon reefs I saw several
 prospect holes & one showed
 some trace of ore showing green
 copper stains & bright iron pyrites.
 At lunch we stopped in a wide
 valley covered by rice fields.
 The lanes were lined with
 large English walnut trees from
 which the crop had been harvested.
 Before reaching San Chuan
 where we camped we passed
 through down sandstone hills
 many of ^{yellow} boulders of which
 lined the road. The country
 was uninhabited & forested.
 No snow mtns could be
 seen in the distance.
- (30) At daybreak there was a fine
 drizzly rain which continued
 all day ~~until 4 PM.~~ The caravan got

started from San Chuan
just as the ^{train} was stopping. We
camped in a temple which was
kept locked & was quite neat.
The valley where San Chuan
is situated is a broad level
rice planted area with small
villages scattered on its edges.
The valleys we have ~~passed~~ seen
from the passes are often very
deep. Some have terraced
cliffs exactly like the Grand
canyon of the Colorado & are
about 2,000 or 4,000 feet deep in
places. On the road were
very few flowers or birds yesterday.
Plum trees were common in some
places. Near the temple I
saw *Triplaris* bushes with
blossoms like the *Peruvia* species.
The Chinese do not take their
religion seriously. Their temples
are given freely to foreigners
for camping places. Only a priest
or two in the used ones perform
worship, the people generally
not using them. Most of the temples
are falling into disuse. The

Temples are nearly all Buddhist
Confucius temples being quite
rare. The people live in
village even in wild country
owing sometimes to protection
but in unincalled towns
due to their sociable nature.
The village are all extremely
filthy, like pig-styes. The
children are always dirty
faced & often dressed in rags.
Swamp seems never to be employed
by the villagers. The poverty
stricken are a mass of rags
tattered beyond description.

The natives north of Tali
are much less subject to malaria
than those met east of Tali. I
should say only 2 or 3% show signs.
Fezerna is quite mounting
owing to the altitude I suppose
for on the coast 20% showed it
partially. The rain continued
after we started at 9 AM. ~~and~~
so we kept going until reaching
a suitable temple at 2:30 after
5½ hours travel. No game was
seen. The plants were thin, chiefly

Iso-cho-to village

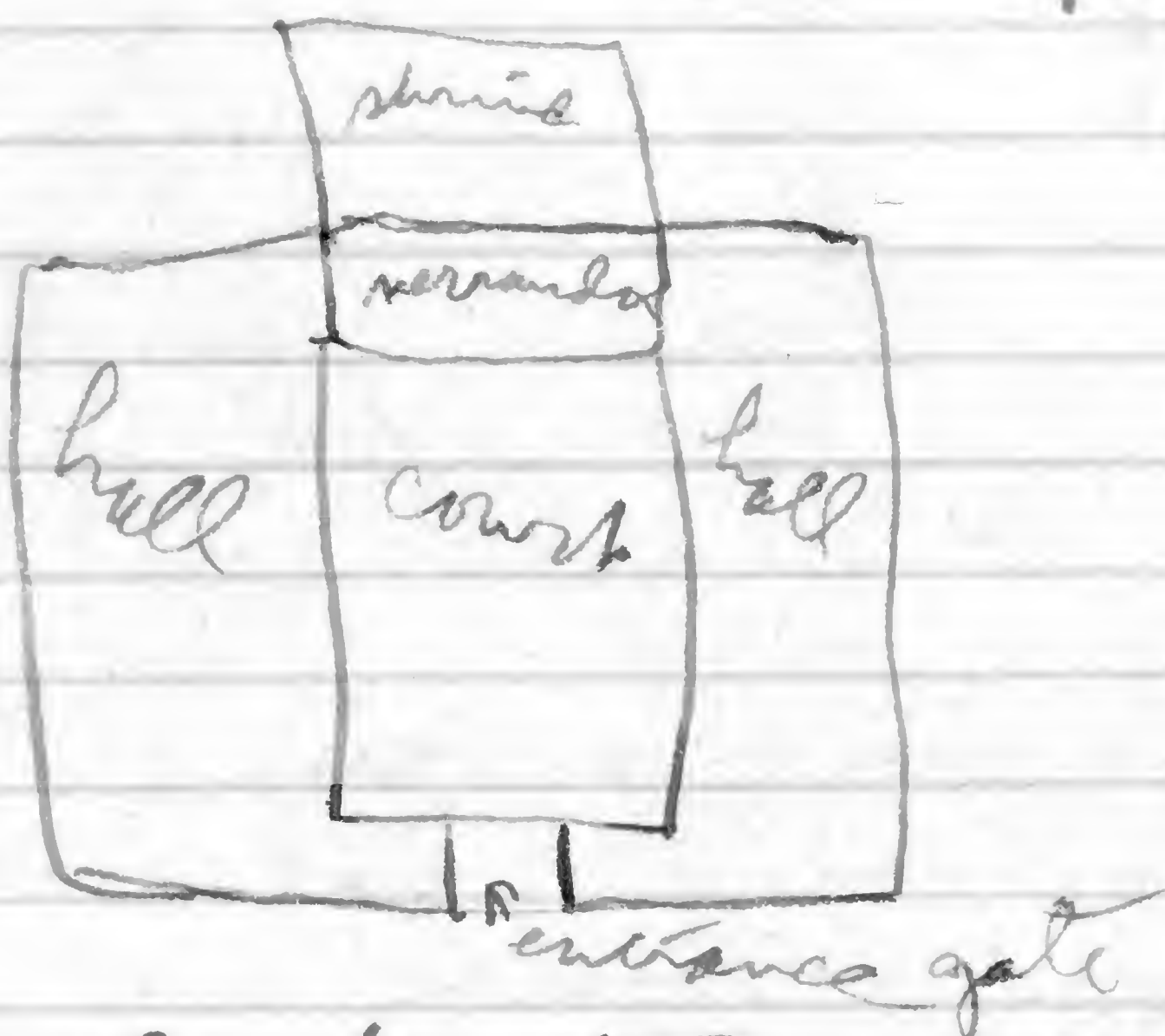
Yellow pine ~~tree~~ ^{without} underbrush
In places. I saw a slender
geranium for the first time.
Many flowers were seen in
the hedys bordering rice fields.
The commonest was a pale blue
Columbine. A showy flower was
a creamy white Rosaceae
2 inches in diameter + growing
on a small straight bush.
A pine fox was another new
flower. There were blue
larkspurs + purple asters.
The sides of the valley out of
which we climbed were sand-
stone, + the road slippery yellow
clay. Farther on I saw lava
formation. W. Ch 2:30 we
made camp at a isolated
temple in rice fields near
the village of Iso-cho-to.
Purple balsams or amur dragons
lined the road. At one place I saw
a field of white balsams but these
of such a cultivated crop I know not.
The rain continued all night
there were no mosquitoes much to

our surprise as all the others were
infested

- (Oct. 11) The morning broke
raining & the rain continued all
day. We started however at
8 A.M. The clouds hung very
low & no mountain tops
were visible. The road led up
a broad valley then rice fields
was level the whole way.
There were quite a few natives
travelling, some with back
pouches, some with rain coats & others
of more wealth carried umbrellas.
The women carried great loads
of vegetables & pears. Often
a heavily laden woman was
followed by her
husband who was empty
handed. I have seen no ~~more~~
bound footed women like typical
Chinese all have bound feet & often
very deep & curved Chinese
in physiognomy. ~~Reached~~ The
caravan reached Chiao to at
3 P.M. & we camped in a small
temple. Everyone got cold & wet
during the day. Saw several
white winged bitterns, small rails

snipe + grebes. Herons, curlews
or allans, tree sparrows, Bulbuls
minna bird + biter, were seen.

(Oct. 2) Temples make ideal
camping grounds. They
all have a central court
where loads may be unpacked.
On each side of this are a long
hall where the loads + the
horses can be kept at night
+ the men sleep. In front
of the shrine is a wide veranda
where we can drive + sleep
+ the inner hall of the temple
is convenient for baggage.



Usually a few trees are growing + in
the temples in use flowers of
various sorts fill the courts.

about the temple outskirts
at Chio Ho I saw Rubus or
bramble growing the first I
have noted here. The chief
thorn here is the rose bush of
which all the hedges are
made. Long twigs of this thorn
~~border~~ border the road & are a
constant menace to the
face & hands of the rider.
The rose twigs are exceedingly
long & slender & push into
the face & clothing with
much facility. The rain
continued all night but we
started out in the rain & glare
as usual. No mosquitoes
bothered us at night. Apparently
mosquitoes do not occur abundantly
above an altitude of 7000 feet.
Here the altitude is about
8000 feet. The men use
the word wa-wa-wa to stop
their animals & shu-m-m
or a hiss to start them. This
latter sound was used by the
Peruvians to stop their beasts.
Along the roadside grew many

I named by black horse two men as
he would never pass another caravan
horse or lead the way.
Thorny ber-beris bushes bearing
bluish-gray fruit. We reached
Suichiang at 2 P.M. & made
camp in a temple on a hill
overlooking the town. Before
reaching the town we passed
thru a pass where yellow pine,
large cone pine, fir trees &
oaks were the forest trees. The day
was raining at the start but ~~from~~ at
10 A.M. it stopped but remained
cloudy. We saw 4 tree pines
on the road, & one on the walls of
a temple. I saw 2 squirrels
in the pine forests. The natives ^{men}
we met in the road wore
goat skin coats, with the
hair on the inside during rain
& on side when it was clear ^{weather}.
The ~~hair~~ hair of the goat here is
long & black like that of Yps
for which we mistook them at
first. Many pear trees loaded
with fruit were seen in
gardens. Fields blue with
columbine were seen in
several places where there was
waste ground.

On the route I noticed patches
of maize in front of the house
drying. Much of it was white
corn like our sweet corn, the
yellow field corn being about
40%. Besides maize crops
there were beans, buckwheat,
hemp, turnips, taro +
the ever present rice

(Oct. 9) The night at Li Chiang was
cold + without mosquitos.
The Mr. & Pentecost missionaries
however told us mosquitos were
common at midsummer. I set
2 traps about hedges + rice field
dikes + caught 10 mammals.
4 were *Pachyura*, 2 *Eprinus* like
house rat *norvegicus*, 1 spring band
rat, 2 small *Eprinus*, 1 *Microtus*.
In the afternoon I set more
traps + caught during the
day 4 *Microtus*, 1 *Pachyura*,
1 *Tupia*, 3 small *Eprinus*.
At 3 P.M. we called on the
British missionaries but found
Rev. Cox away, only his wife +
children + another woman was
at home. They have been in China

for 6 years + have not seen
European women for 2 years
previous to our arrival.

They said the natives here are
not Chinese at all but a
distinct tribe which use their
own language + talk Chinese
only when forced to by convention.
The day was cloudy but no
rain fell. Many natives,
(mostly) visited us. One boy came
~~with~~ bearing a pet hawk on
his arm. Another brought 2 green
snakes + others brought rats
+ mice.

⑦ Ninety rat traps were set by
A + I along hedges + dykes
in the rice fields and our
catch consisted of 50 mice +
skinned of each the following
species: 1 Pachyura, 1 Microtus
1 Apodemus, 1 Turpin, 1 Spizella
noveboracensis, 2 Spizella, small,
1 Spizella, Rat, The natives
brought in large numbers of
skins of civets, muntjacs, foxes
leopard, I saw a flying squirrel.
None of the skins had skulls.

- most of the small mammals
we have been trapping are
caught as commonly in the
day as the night. The same
species were caught on the
dykes as in the hedges.
Some of our traps were stolen
today, no doubt by the small
boys who have watched &
followed us. Theseurchins
have brought in today ^{many}
frogs, toads, mice & rats
and a live Turpial. Two
of the 9 missionaries visited us
at noon, Mrs. Cook & Scotch
girl Miss Beggs. ~~At~~ the
surrounding country remains
cloudy so that the snow
mountain remained hidden.
During the afternoon we
had a heavy rain-shower.
(5) The day was cloudy like
the others but no heavy rain
storm occurred. The boys of
the Tichiang brought in 4 live
Turpials which were wild but
not savage & I kept 3 for
pets. They uttered a peculiar

squeak when frightened & made great leaps. When handled they turned over as quick as a weasel & were very agile. The merchants brought in 2 snakes, frogs & a *Myotis*. In the afternoon the mandarin called & offered to trace the 18 stolen rat traps. Two old men from the sunu native village visited us also. Among ~~the~~ our traps being stolen we caught only 1 *Parus* & 3 *Epigonus*. A great number of skins of birds, cats etc were brought to us by the natives & the priest.

(6) Day rainy without any sunshine. We caught only a few small mammals in traps set in the forest dry hillside. Two of the *Tupia*s died during the night & one escaped. Adults are not easily tamed. The female organs are quite peculiar & resemble those of the mole, the vagina being at the base of a long

- ditensis as in the Hyacinth. This organ is as large as the penis of the male. None of the ♀ specimens have contained embryos.
- I am surprised that small mammals (Pachyura, Microtus & Spizella) are so abundant in the rice fields here while a little lower at 6000 east of here there are practically none. The lack of rodents between Yunnan - fu & Tichang a Tale I attributed to rice culture but it cannot be there as here rice is as extensively grown & the mammal fauna. It must be owing to the lower elevation & some climatic difference not well understood yet by us.

- (7) The weather continued rainy all day, especially violent in the morning like a Soudaster on the Atlantic. The natives remained away owing to the rain.
- (8) During the night I had the asthma & felt rotten in the morning. A

in the morning was suffering from a swollen ~~low~~ right hand which showed a tendency to blood poisoning. He lanced it & then poured boiling water on it which pained him so he cried like a child but the pain subsided. Some boys brought me 2 *Myotis* bats different from the black one, that night a ~~chinese~~ ^{native} appeared with a small wild cat which we purchased & skinned. The rain let up in the afternoon & the sun came out for a few minutes. The mountains nearby were covered by fresh snow in the forests down to an altitude of 9,000 feet.

⑨ Morning dawned cloudy. The caravan got away at 9 AM. As soon as we moved beyond the temple the snow mountain of Li-chang came into sight. It rose precipitously & was crowned by several sharp peaks, in appearance this similar to the peaks of Mt. Lema.

The slope of the sides is so steep that only a ~~little~~ thin layer of snow can lay on the peaks.

We reached the mountain village at 1:30 P.M. & camped in a small ~~village~~ temple above the village. The place was pleasantly situated in a grove of spruce with a stream of mountain water running thru the temple court. Our road was level & followed the floor of the valley thru the meadow fields. Many fields were being plowed by Gyokos, Joxen.

The plan was that we were to be on a wide angled shore, much of the houses was made of wood. The oxen was all yellow or Indian, no caribou being met with. After lunch at 4 P.M., I went to the base of the mountain with Li to set some traps. The lower slopes of the mtn is clothed by fine open forest of lime oak & maples. The rock formation was gray limestone.

I saw one gray squirrel & a
large red & gold pheasant.
Fine streams of clear water
are flowing from the mountains
at short intervals. At
dusk the Austrian botanist
Dr. ^{an Austrian} Herr Baron called. He has
spent two years here owing
to having been detained by the
European war.

(10) The night was cold & clear
but without frost. The traps
yielded 10 rodents, one a new
species of *Apodemus* much
like our *peromyscus*. The others
were the *Peromyscus*, small
Epinomys & large *Apodemus*
of Sichuan. ~~There is also~~ The
Microtus is absent apparently.
The name of this village is
Ssu - Sam - Chong. After
lunch I started up the
mountain with the
two hunters & their 6 dogs.
We ascended the canyon the
of which flowed past us. The
the country was very wild
& beautiful. Great limestone

cliffs rose on all sides clothed
by spruce, ~~mountain~~ oak & bushes.
On the road thru the canyon
there were many hazel bushes
the nuts already picked. High
bush cranberries were ripe &
carmine red on tall viburnum
bushes. The only conifer I
saw was the spruce which
outnumbered any other tree.
The hunter & their dogs took
over half the canyon & I
took the other. They yelled
continually the dogs barked at times
but no goral or other game
was flushed. They finally
killed a fine large porcupine
& brought it in in the flesh.
The leaves of snowshoe, Ribes
maupii, rododendron etc.
are already tinted yellow
by the frost but I saw no
red tints.

⑪ Today we had another
clear cool day. The traps
yielded no new mammals.
Q + his men went up one of
the mountain roads for a while &

I discovered a flat meadow
near timber line at 12,000 feet
where we could camp. The
^{campfire} Samson, the Heron's diomedea
is at the temple. He has
spent three years in this
part of Yum-man collecting
plants.

(12) We had decided yesterday
to move camp to the
high meadow where A had
seen many runways of a
small rodent. The traps
set near the temple however
yielded 2 new shrews both of
small size & the village
boys brought in 2 new bats,
one a *Myotis* & the other a
Pipistrellus or *Parvulus* perhaps.
Owing to the delay of the
mules we got started for
the mountain at 10 AM.
The lower slopes were forested
by a small pine but most
of the hillsides were covered
by scrub live oak. At 11,000 feet
the spruce became predominant
& extended to timberline as the

- Only fresh tree. With the
spruce or timber line were
prostrate junipers. I noticed
on the way up a few
• aspen trees of small size
but no other Ardentifera
tree. Near the Letchworth
on cliffs at the base of the
• snow mountain I saw
many resurrection plants
like those which ~~caused~~
furnished so much amusement
in my boyhood when revived
by plunging in water. The cliff
in place were covered
thickly by this moss-like plants.
• Among the oaks & maples
near the cliff pond I saw
some large birch trees
growing. The meadow in
• which we are camped
is a mass of herbs partly dried
& gone to seed. In the spring
these woods evidently many
• flowers in blossom here. The
only flowers I have noticed
are a few gentians & larkspurs.
We ascended about 1,000 feet above

On the way down a horse bucked & lost the martingale & crumpled off. I found a sack the pieces of strap in his hands & the wrecked saddle still on the horse.
Camp I set some 50 mouse live traps. The meadows on either line are riddled by the burrows of a small rodent, all running ~~apparently~~ no doubt.

(13) Today was a wet one at the dawn, during the night it rained & in the morning there was much mist & cold wind. I shot a fine ♂ goral a few 100 yards from camp ~~and~~ from a cliff where we had set mouse traps last evening. The goral was held at bay by the dogs. After it was shot it fell off the cliff into the creek & broke its incisor teeth. The coat was in fine fresh winter pelage but the back was not far. The stomach contents were leaves, bark, ferns & bamboo stems ^{+ grass}.
I went out again with the dogs & hunters but saw no others altho fresh tracks were seen. Other gorals near snow line, & crickets in the mouse traps.

in the alpine meadows
20. Lemmings like mice & 10
large eared Arvicolus. No
large rodents or shrews appear
to live here.

(14) Started at daybreak
with the 4 hunters & 6 dogs
to hunt serow & goral.
We ascended the mountain
directly opposite camp &
then when at 13,000 feet
turned ~~off~~ and followed the
flank of the mountain.
The dogs failed to bay any
goral but eventually at
9 AM - I saw a goral crossing
a meadow & disappearing into
a wooded ravine. This animal
was about 500 yds away so I
did not shoot. It was not
in any great hurry but proceeded
by short bounds or lopes, stopping
at intervals but showing no
nervousness. I went over with
one of the hunters but no dogs to
find the goral but failed. As we
were searching another goral

approached us from the opposite
direction coming over a meadow.
I hastened to get a clear shot
at 3 or 4 yds but it reached
the ravine & disappeared
like the first. We remained
out until 2 P.M. but saw
no more gorals. In color
they are exactly like the
gray of the limestone cliffs
in which they inhabit & cannot
easily be seen unless on the
skyline or in rapid motion.
The dogs trail the gorals
on the cliffs & either hold them
at bay or drive them out across
meadows to other refuge. Without
dogs they would be very difficult
to hunt. There is slight chance
to see them in still hunting
as they seldom leave the forested
cliffs. The skin shows glands
in both fore & hind hoofs but
no lacrymal gland on face.
The meat is of fine flavor & tender
with the least goatiness. The
commonest shrub is the Rhododendron
of which there are many species.

Moose names -

Shrew	-	che - nee - cher
rat	-	How - tzu
bat	-	Pe - em - fur
porcupine	-	How - cher
cat	-	Ye - mow
chipmunk squirrel	-	Tal - un - zah
chipmunk	-	How - cher
squirrel	-	(Stza) Kang yu
serow	-	Sal - way

here. Some at timber-line are
large as trees but wide spreading
thrust like in habit. In spring
the floral display here must be
wonderful. We caught
many small Microtus at
timberline + a large eared
Apodemus in size + color like
our Peromyscus. ^{Caedon Blarina}

- (15) A took his turn today +
went serum hunting but returned
at 10 AM with another 5 goral
no serum having been seen.
This goral he shot as it ran
down a cliff chased by the dogs.
I caught 2 new shrews today
one a new genus to me with
long robust hair + a club-shaped
tail. The other was a Sorex. I
also trapped a Pachyura like the
small one ~~and~~ look at the temple
with valley. The weather was
windy cloudy but the night was
clear. ~~see~~ A diminutive bird
yesterday Baron Veron who came
up climbing one of the high peaks
but he did not have time to reach the
top. He said in my opinion the

herbs in the meadow above camp
are in blossom & the floral display
is a blaze of red & blue

- (16) I started at 7 AM with
the 2 hunters & their 6 dogs
to hunt goral on the forested
cliff above camp. In one
of the high meadows at about
13,000 feet we found a small
viper in ~~the~~ a grassy meadow
which was quite active altho
it was cold. We also captured
2 small skinks in the grass
at the same high elevation.
At 10 AM the dogs bayed
a goral on the cliffs below
so the village hunter turned
the red hound loose which we
had been holding for snow
trailing as the other dogs were
worthless. In a short time
after the red dog was loose
~~the~~ we saw a large goral
ascending by short jumps
the cliffs toward us. It came
on without stopping apparently
concerned only in escaping the

dogs + not seeing us.
At 50 yds it turned down a
small gulch + came directly
toward us breathing hard, at
20 yards it saw us + didn't
in the pass but it did not
turn back but came on again
at alope directly forward
at 10 + yards. I pulled the
trigger of the 250 Savage when
it got opposite to me
but the rifle was not cocked
before I could adjust the
hard working mechanism
it disappeared over
down the cliff behind us.
I finally got the rifle to
work + fired a flying
shot at it but it took no
notice of that. In ten
minutes the dogs came up
on the trail + trailed the goat
down the cliff where they layed

it far below. The village
hunter went down at once
after we had recovered from
our disappointment & brought
the dog up. The pack
at 2 P. M. bagged another
goral high above us in the
wooded cliffs. After
an hour's bagging, I saw a
goral crossing the open
meadow south of us by
short bounds. At 4 or 5 yds.
I fired at it as it reached
a moment's mark. The
second shot hit it square in
the side & passed thru
the kidneys & intestines.
It fell & then ran a short
way & lay down. The red
dog however was on its
trail & jumped at again.
He pursued it over a cliff
& the hunter went down
& recovered it. This goral
proved to be a ♀ 2 years old
with horns just sprouting.
The stomach contents were
leaves & herbs only, no grass.

Four

~~Three~~ of our Jacks remained
baying high on the mountain.
So we went in search but
recovered only 2 of them.
We returned to camp at
sunset. On the way we
passed thru a fine grove of
~~fine~~ Rhododendrons some
20 or 30 feet high in pure
growth. Beneath them was
a tall growth of Bamboo
grass 6 feet high. On the
edges of the grove I saw
several tall Birch trees.
In the early part of the day
up till noon it was quite
foggy where we hunted.
During this time I saw only
one goral which was in view
a few seconds only as it
ran down a nearly vertical
cliff. We caught in ~~the~~ our traps
another long mounted blind shrew which
resembles *Neurotrichus* of California
in characters. A caught ^{small} brown *Sorex*
also besides *Aporhiza* & *Microtus* in numbers.

(17) Owing to the tired dogs we remained in camp today and amused ourselves with small mammal work.

The day was absolutely clear all day, the first we have had without fog. A heavy hoar frost + ice on standing water met ~~me~~ ^{our sight} at daylight.

I caught another long eared shrew + many Microtus + the 2 species of Apodemus. The village hunter went out with a 3 barrelled gun + searched for the lost dog, he found it

dead killed by a goral where we last heard the dog barking.

The other dog returned to the camp at night. These Moss hunters depend wholly on their dogs when hunting.

They shout constantly to them + warn the whole countryside.

They pay no attention to the wind either. The dogs drive the game or corner it + they shoot the animals at very

short range. The spears they carry are very primitive. The village hunter has an old smooth bore loaded with a ball which he fires by bringing a lighted string attached to a trigger which carries it to a powder fuse connected with the charge by a hole in the breach. All of this action takes time so he must hold his aim accordingly or the object in order to hit the mark. The other hunter carried a crossbow which shoots steel headed darts & also wooden ones for small animals.

(18) Night clear & calm with a heavy frost in the morning. A went south with the hunter & dogs to the serow haunts. He found many tracks & much spoor & dung in the forest at timber-line. The dogs started a large serow & followed it down the mountain side to the base. The hunters & all followed but no

serow was encountered, only the tracks of the fleeing animal which left a large print where it made great leaps downhill. No game was seen on the way over.

(19) We both went out hunting goral each taking a hunter & 3 dogs. A went to the cliffs above camp but his dogs were so tired from yesterday that they took no interest in fresh goral trails. I encountered with the 3 dogs a serow soon after leaving camp in a thick pine forest where several piles of fresh deer were seen. This serow like the first one bolted straight downhill, the dogs following to the foot of the mountain. We finally recovered the dogs by a long chase to the base but never got a glimpse of the game they were pursuing. In the morning before starting hunting I secured 3 serows in the traps: a Sorex, a Pachyura & a long.

mounted games. The woods
at this altitude (2000 feet) is
now brilliant with fall leaf
tints. The dark green firs are
mixed on some hillsides with
red leaved ash tree & bright
yellow leaved ~~beeches~~ alders &
maples. There are many
red leaved vitumnus bushes
also ^{which} ~~to~~ lend color to the forest.

(20) The morning was rainy, a
soft quiet rain falling con-
tinuously, so we could not go
out with the dogs. A. caught
a ~~♂~~ Ocotona or chipmunk
in his traps & I got a new
longtailed Apodemus in mine
besides many large tailed Apodemus
& Microtus. The boy to who
formerly assisted Mr. Forrest
with his plant collecting has
developed into a quick shrewing of
mice & is very efficient already.
His salary is only \$8.00 Mex while
his cousin the cook's is \$6.00 Mex.
Wm the interpreter gets only
\$25.00 Mex & the cook the same.
All boys feed themselves.

In the afternoon I caught a brown
unicolorous ♀ weasel in a steel trap.

The packing + saddle animal
are equally cheap. The food
cost 30 to 40 cents Mex a
day + saddle animals the
same. A went goral hunting
but the dogs were tired +
refused to work so nothing
was secured.

(21) We had another red letter day.
A went out goral hunting with the
dogs + bagged a fine ♂ + a ♀ goral.
He also saw a musk deer which
the red dog chased across a wide
meadow but could not get a clear
view of it for shooting so lost the
only chance we have had. The ♂
goral he shot threw the heart as it
stood on a cliff + the shock caused
it to leap straight out stiff legged
+ fall to the bottom of the cliff.
The ♀ he found asleep on a ~~cliff~~
ledge in the sun. I got another
new shrew, a black large headed
form, like a species of *Pachyura*
or *Cronidura*. Trapped *Sorex* +
Longimittus *Microtus* also. Day
cloudy + windy.

(22) We broke camp & returned to the temple at the village this morning. I went with the dogs & the 2 hunters along the mountain side hunting. We went at the 12,000 foot level thru the circe or basin where A shot his 2 goral yesterday. The dogs however were tired & ~~kept~~ followed at our heels & took no notice of fresh trails or tracks, some got nothing or saw any game. The forest from this elevation to timber line is made up of fir trees only. Today I saw some of the trees with cones & these stood upright. Under no trees are cones as in the case of spruces which are the common trees from 12,000 to 9,000 feet. Above 9,000 feet the character of the trees & bushes changes radically due no doubt to moisture conditions. The upper level above 11,000 is very moist the floor of the forest being a carpet of moss & herbs.

below this altitude it is dryer
without mossy ground. Fog
& rain prevail almost daily
above 11,000 feet. On the ridge
at 12,000 I saw some small
bushes of a peculiar square
leaved spruce with bearing
large black berries.

(23) No big game was hunted
Today collected dogs hunters
both needed a rest. These
moss hunters are good woodmen
and hard as nails. They camped
in the open while with us
on the mountain & refuse
at tent. They slept beside
a camp fire rain or clear
weather & are physically the
hardest men I have met.
The Chinese are quite the reverse
& above tent life of any kind
even in fine weather. The
traps set at base of the mountain
near the old temple produced
3 *Peromyscus*, several large
sawed mice & a long tailed hairy
Apodemus & a small *Eutamias*.

In the hedges bordering
turnip fields I met with
several pairs of Ring necked
Pheasants + but several
lost killed none. They
fly slowly but before I could
get clear of the bushes they
were well out of range.
I only wounded those I shot at.
Weather very windy + partly
cloudy like yesterday with
several rain drops at intervals.

(24) In the morning I went
out with the new hunter
for serow. He sent his
dogs up the mountain
+ the old hunter waited
below but the dogs flushed
no game. Some of the village
boys brought in 458 mycteros
which they caught in a cave +
several Pipistrellus. Many shepherds
with their flocks occupy the plain
near the village. There sheep are
all black ones with only three or four
white ones. They are all men + women
long black woolen cloaks like typical
shepherds. Their dogs are collie like.

(25) Today I went out
hunting with the old
hunter + his dogs. We
went south of the temple
on the flanks of the mountain
some 500 feet above the valley.
I took a position on a
point nearly halfway to
Lichiang. The dogs however
bayed no serow while I was
there (9 am to 2 P. M.) so I
returned to camp disappointed
at 7 P. M. One of the hunters
returned to the temple with
the news that one of them had
shot a serow 20 li away
high on the mountain +
that the large ^{red} dog, the only
good test hound in the pack
had been killed by the serow
having been flung off a cliff
by the infuriated animal.
At 8 P. M. the hunters returned
bearing the serow on a pole
+ the old hunter carrying his
half dead dog in his arms.
The poor dog was breathing.

but showed no other signs of life + lay perfectly still wherever placed. There ~~seem~~^{was} was a fine large one + ~~was~~ about 300 lbs in weight. One horn was broken when it fell from the cliff after being shot. The mountain slope where I waited was covered chiefly by longcoed fleish pine. Some of the largecoes had been split open by the natives for the large edible seeds they contain. While I waited at 9 am. several parties of women came up the mountain to gather wood. Others came to gather broken ferns large immense bundles of which they carried back on their shoulders. During the afternoon we had several showers.

(26) The day was very foggy with a misty rain so we could not go serow hunting on the mountain. The serow

was skinned by the men.
One horn was torn off the
case & the top of the tail
for about 2 inches was ^{missing}
& the skin of the neck was
the thickest part but
all of the skin was quite heavy
about equal to elk. The animal
was an old ♂ with worn
incisors. Glands were present
in all four hoofs. In distinction
to the goral there was a
lachrymal gland with an
external opening on the
face. The ears were long
decidedly longer than gorals.
The stomach contained
leaves, twigs, but not
a blade of grass. Leaves
chiefly of aspen, maple
& a smooth Myrtle leaf.
Two sorts of hard small
berries were also found
in small quantities

The villages & cities in this region are practically Tibetan being unwallled & without upturned gables. The chief characteristic of a Chinese town is its filth & its uniformity. All Chinese towns are alike & are moreover alike in every part. Ten square yards of almost any part is like all the rest of the town & of all Chinese towns as well as those transplanted ones in California & other foreign parts.

(27) I spent the day serow hunting in the range across the valley. The new hunter took me to a deep ravine or canyon walled by great limestone cliff with some bushes on the ledges. There were 4 men with long barrel match locks with 4-5 dogs of the pygmy type, small size & short haired not Chow (Chinese) dogs. The guns the men carried had only short ^{curved} stocks which the bold

Mammals of Si Chiang

1 Pachyura -

Very abundant both in the rice dykes & the hedges. This species is highly carnivorous & partly ate many of the mice caught in traps. No gravid ♀s obtained, active day & night

2 Tupia

I caught one in a trap set in a rice hedge but we saw none in the trees or garden walls. The village boys brought us 5 alive on strings which they had snared. These made great leaps when frightened & gave out a squeaking cry. They were agile as weasels & could not be turned on their backs easily. The ♀ has a long penis like clitoris in the base of which the vagina is placed & ~~this~~ her sex organs closely resemble those of the male. No gravid females seen.

3 - Microtus -

Tunnels & runways of this rodent were abundant in the

rice dykes. ~~Some~~ Some were ^{caught} also on the hedges. One gravid ♀ with 3 embryos obtained. Many caught during the day.

4 *Apodemus*

A fairly common species about the hedges, but only a few adults trapped.

5 Spiny rat,

A long-tailed species closely resembling *Apodemus* but with spines in the fur was found here. Two were taken one in the temple & another in a hedge.

6 *Eprinus* (small)

This species was ^{more} ~~very~~ abundant than any other. It occurred in hedges & rice dykes & was often trapped in the daytime. The ♀ contained from 4 to 7 embryos.

7 *Eprinus* (brownish?)

Several specimens like this robust with short tails & white feet

- were trapped in hedges + in the temple. The village boys brought many for sale

8 *Sciurus*

- Two were seen in the pine forest in the pass leading to Lilliana but none were seen by us in the town altho the missionaries said they are common.

9 *Myotis* -

One brought to us by a boy. A small but like the one seen flying near the temple at dusk.

10 *Myotis* - (black)

- A specimen brought from a boy who caught it near his home.

11 *Myotis* (brown)

- Two brought of a native boy.

12 *Felis* (spotted)

- A small spotted cat brought of a tribesman who caught it in his yard where it was prowling chickens

Skins without skulls purchased
of natives at Sidway

13 Civetta, large

14 " small

15 Pteropus

16 Scuroplemus, large

17 " small

18 Myotis

19 Uro

20 Vulpes rufus

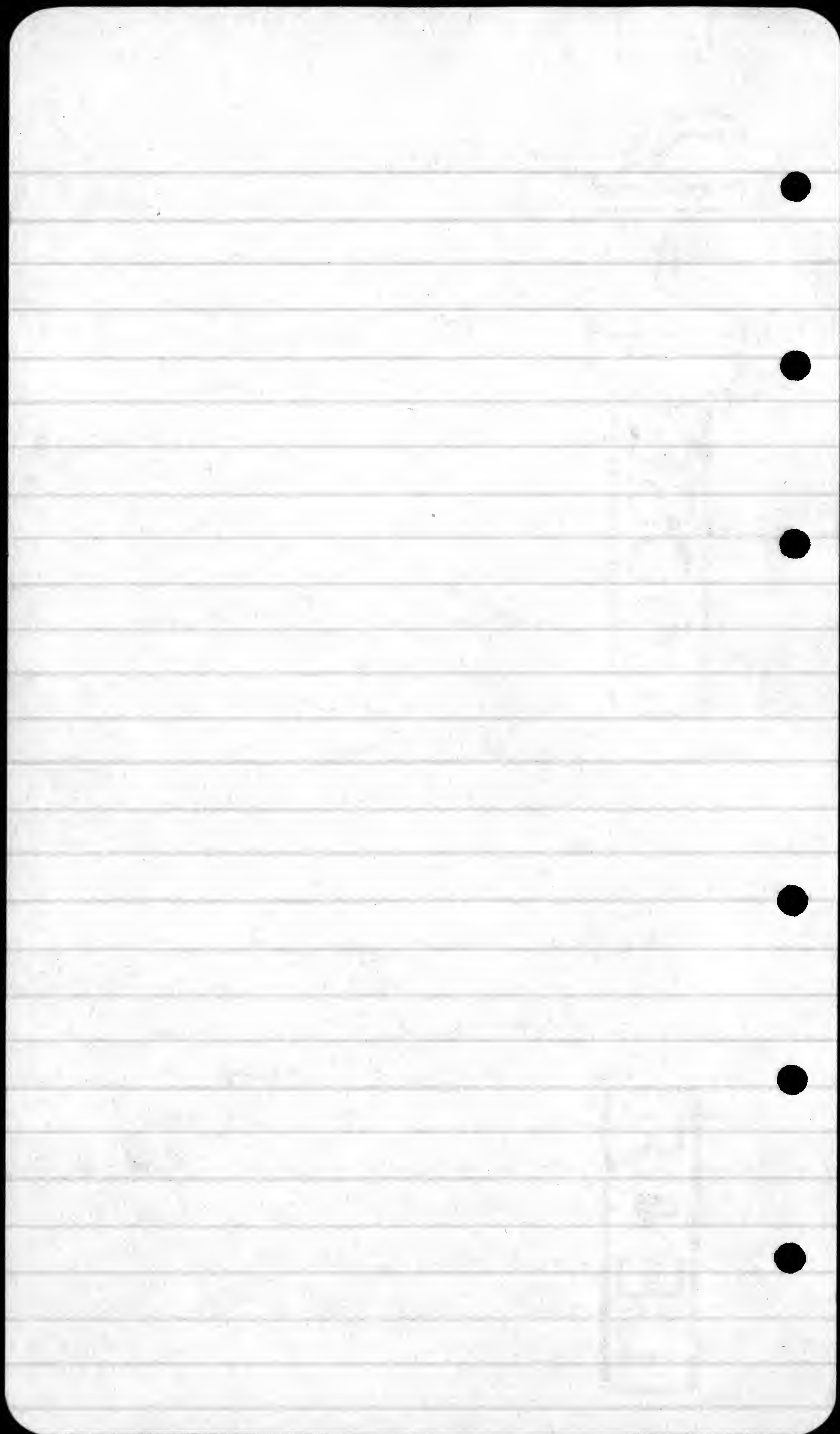
21 Vulpes

22 Cervulus

23 Felis, striped

Li Chiang.

- The town is situated on the ~~west~~ ^{north} side of a wide valley filled with rice fields. Bordering the valley are pine clad rolling hills. The commonest pine being the yellow Russian places there are big coned pines ~~but~~ & firs. On steep hills here oak scrub is abundant. The altitude of the town is 8,200 feet west & north high hills & mountains are to be seen. On the slopes surrounding the city maize fields ~~traces~~ occupy the ground. Rose hedges are the predominant sort in the cultivated ground. Pears, peaches, oranges, walnuts etc. grow well here. The inhabitants are chiefly a tribe (Mosos) ~~and~~ who wear their hair long & are squat & heavy in build & not at all Chinese. Only the Mandarins & some of the merchants are Chinese.



Mammals - Timber-line ^(12-13000 ft)
Sumu Natin = Son Sham
1. ~~Neosorex~~ ^{honey-gal} ~~honey-gal~~ (Yang-he) ^{honey-gal}

Solitary individuals were found living in the spruce forest at timber-line on limestone cliffs only. They apparently never leave the forest. We hunted them with dogs & saw them only when thus pursued. They eluded the dogs by running up & down steep cliffs & at times crossed open grassy slopes. Sometimes they took refuge in caves or at base of cliffs & fright the dogs, in one instance killing a dog when held at bay. No note of alarm or other noise was observed to emanate from them. They were found from 12,000 feet to an altitude of 14,000 feet.

2 Capricornis (Sal-way)

Also an inhabitant of the high forest from 12,000 - 13,000 feet elevation. Two were flushed in heavy spruce forest by the dogs & pursued down hill to the base but neither were sighted. Tracks & piles of dung were seen ⁱⁿ forest.

3 Moschus

Patches of small dungy patches
be the droppings of this deer were
seen in forest on cliffs at 12-13,000 feet
The dogs ~~never apparently~~ flushed
one of these deer & ran it over
a broad meadow but I could not see
it to shoot

4 Cervulus (Muntjac)

Baron Henri the Austrian
Botanist saw one near our camp
on his way up to visit us one
morning. None were seen by us.

5 Apodemus (large-eared)

Abundant in forest under logs
at 12,000 feet.

6 Apodemus (small eared)

One taken in forest at camp.

7 Apodemus (pygmy)

Two secured in forest at camp.

8 Apodemus? (long-tailed)

One secured in forest at base of
rocks near camp.

9 Microtus -

Very abundant at timber line & above on grassy hillsides where they had runways & burrows. Often before the burrows was a conical mound of earth thrown out. They also lived in the forest. Found from 12,000 to 14,000 feet.

10 Lepus -

One seen in forest by A on two occasions in same spots. A few droppings seen at various places from 12,000 to 13,000 feet.

11 Ochotona -

One trapped by A in rocks in forest at camp.

12 Hystrix -

One secured by the dogs at head of Temple Creek at 12,000 feet.

13 Blarina Talpa?

One secured at timber line at 13,000 feet in a trap at base of a boulder in meadow. Another caught at camp in a trap set beneath a log.

14

Long-armed

Microtine

Several trapped in forest near camp.

15

Sorex — (brown)

Three taken in forest at camp.

16

Pachyura (brown)

Two secured in forest near camp.
One seen eating a Apodemus in
a trap.

17

Pachyura (black)

A large headed short tailed genus
secured in the rocks at camp the
last day.

18

Putorius (cinnicalored)

One ⁱⁿ ♀ secured in a steel
trap near camp.

Maris. of ^{Hs} Szech Shan Chung
(Ginn mtn. village)

1 Sorex (very small)

⁴ ~~Three~~ only secured, in forest.

2 Crocidura (large slaty)

Abundant about rock walls, ledges
& in forest. Carnivorous.

3 Crocidura (light brown)

One only secured, in a rock ledge.

4 Rat (Spring)

Abundant in the forest about
rocks & caves.

5 Apodemus (very large)

One secured in forest.

6 Apodemus (large eared)

Abundant in forest, Timberline & so.

7 Ap. (small large eared)

Common in forest at base of cliffs

8 Eupomys (small)

Numerous in rock walls & ledges.

9 Microtus

A skeleton in lost trap in ledge
(the only evidence)

10 Sciurus

Several secured in maple &
oak forest near
old temple. Pelage lighter than Japanese
specimens. (True)

- 11 *Tupaia* -
One bought from village boys. Not
seen in forest, only in village.
Upper limit of range.
- 12 *Myotis* (seal brown) ^{and}
~~two~~
One small species bought from village
boys.
- 13 *Pipistrellus* (light gray)
One bought in a lot of *Myotis*
from village boys.
- 14 *Myotis* (large)
Several bought from boys who caught
them in a limestone cave in a wheat field
- 15 *Myotis* (small)
About 50 bought from boys like last.
- 16 *Myotis* (black)
One bought from village boys
- 17 *Epomops morroensis*
Several brought in by village boys
but none preserved.
- 18 *Caprimulgus*
An old ♂ shot by village hunter south
of temple on spur of Sam Khat. at
10:00 or 11:00 p.m.
- 19 *Lepus* - *Tu-leh* (Moso)
Pills seen on bare hillsides near
temple
- 20 *Cricetulus* (longthd slaty) ^{Two taken} in forest.

21 Mustela (white bellied)

One caught in a rat trap
where it had devoured a rat the
previous night.

22 Crocidura (large headed, slaty)
^{Thall}
One trapped in the forest same
species as timber-line camp.

23 Mus musculus -

One secured in a hedge
bordering a wheat field far from
the village huts.

24 Myotis (black small)

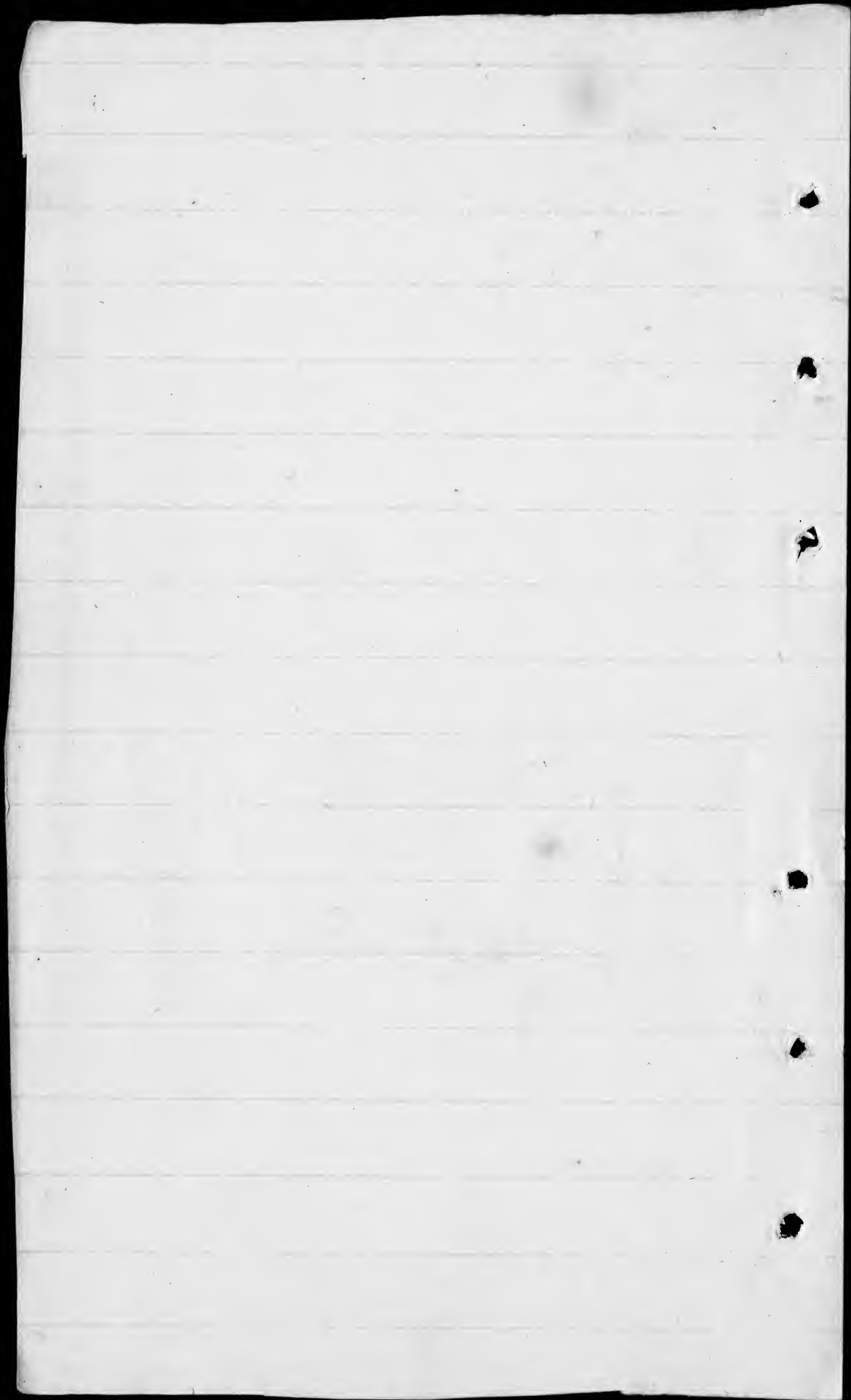
Two

25 Elaphodus (Black Muntjac)

One brought in by a shepherd
who found it dead a day after it
had been shot. Tache (Moro)

Bear

Guh (Moro)



Ishu Shan Mtn. Camp
Camp in meadow on floor
of a ravine at 12,000 feet alt.
Surrounded by fir forest +
rough limestone cliffs + ridges.
Above the camp rose pined
+ grassy slopes to the sharp
bare peaks above timberline.
Timberline variable, highest
trees at about 15,000 feet but
not becoming prostrate shrubs.
No meadows on high peaks
or glaciers owing to their
almost vertical slope. Snow
only in thin streaks. Rock
formation limestone only,
very cavernous, color gray
+ hard. No water in ravine
owing to porous nature of
rock, only when melting snow
is present is there water in
the creek near the camp.

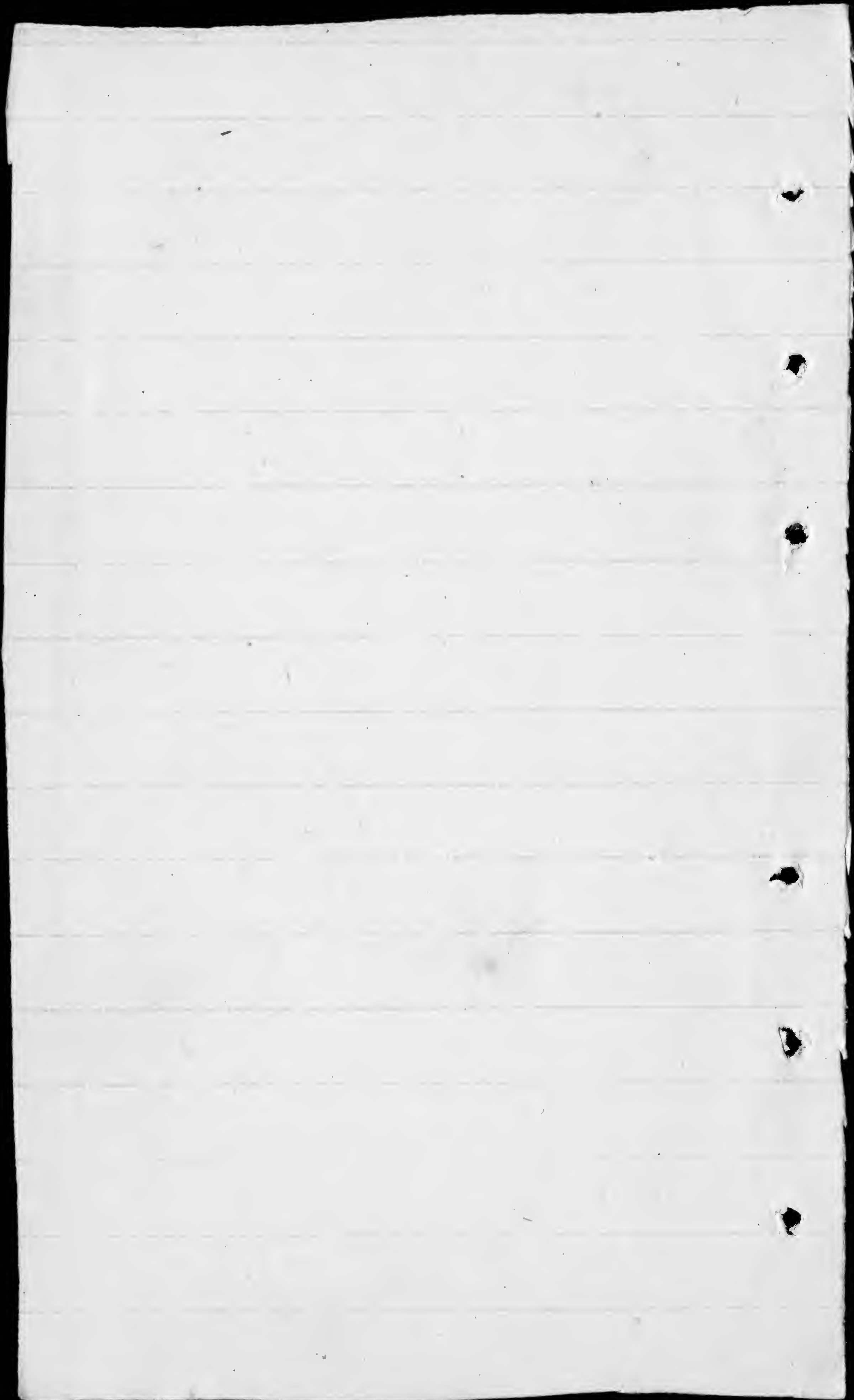
~~The~~ Meadow covered by dead
herbs, very little grass, in places
tall spiny bushes of Berberis & a few

willows, maples & ash & oak
in forest but fir trees predominate
everywhere. Thickets of tall
cane on soil covered slopes above
which groves of Rhododendron
trees grow in pure forest ^{found}
No viburnum, spruce or pine
trees at this altitude.

Clear nights cold & frosty
with thin ice. Days chiefly
foggy & raining, often very
windy. Leaves of maple,
ash, willows, etc. brightly
tinted by frost, red & yellow

Ssu Shan Chang camp.
Ssu Shan village camp.

Situated at head of Luchang
plane or base of Ssu Shan.
cultivated fields devoted to wheat,
hemp, turnips, etc. Village
fields irrigated by streams from
ssu Shan which issue a large
affair at base of mtn from
porous limestone cliffs. Forest
of lower slope of mtn spruce &
2 species of pine, (small conifers),
Oak, maple Linden, hazel
alder, willows, viburnum, &
much 'aspen' in places.
Elevation 9,000 feet. Rock
formation all gray hard limestone.
Soil red & stony. Village about
100 inhabitants. Temple small
with Tibetan characters not
Chinese; Buddhist.
A green stem bush-like *Ephedra* ^{the} a commonest
sort of thickets. Hillsides covered by
a dense growth of short evergreen
scrub-oaks.



to their ~~face~~ ^{check} when firing.

(28) Both parties of hunters reported finding nothing yesterday. I remained in camp to skin the 2 days catch on hand. Last night I caught another of the very small *Sorex* but the skull was smashed as in the first one. The day was rainy, raining up to 10 AM & very windy & cloudy all day. A. had to cut his right hand again as it was swelling. He has been in camp for the past 4 days helpless.

(29) We had another misty day with fog on the mountain tops all day. The wind blew strong & gusty. The traps contained a lot of large *Apodemus* & spiny rats. I have shot 3 pheasant here & seen several others in the fields. They are a beautiful species called Anderson's Pheasant (*Phasianus elegans*). I caught

a lot of Microtus for the first time today. They are really abundant in the banks of ditches but not along streams or in rock walls or hedgows. This is the larger Lichianus species

(30) The weather today was rainy & windy like yesterday. I caught a new Shrew in the forest today. It had a long tail & long hind leg & is a jumping form no doubt. In color it is slaty & ~~has~~ a long naked tail. The traps contained 21 mammals, chiefly Microtus & 2 species of Apodemus. The native hunters have been out 3 days now but have not returned with game.

(31) The traps produced another longtailed Shrew & one of the rare black Crocodyrus like those from timber-line camp. In one of the rat traps I had a white bellied weasel different from the timberline specimen. This one yesterday on the receipt of a large rat caught in the same trap. At daylight ~~there~~ landscape was covered by a

dense ground fog which lifted soon.
On going out to the traps I saw two
Anderssons pheasants fly down from
the forest to the edge of a field but
they eluded me + ran into the
forest again without allowing me a
shot.

Nov. 1) The day dawned
disastrously rainy with a low
dense fog enveloping the
landscape. I was not able
to get out to the traps until
9 am - owing to the bad
weather. The catch con-
sisted of one more large headed
Crow-dura, one large Crow-dura +
8 Spinnip (small) The pheasants
do not come down to the field
in rain or fog but keep to the
forest. The rainy season this
year is very late, usually (the
residents say) it stops Oct. 15th
but we have had 10 days of contin-
uous rain + mist + the end is
not yet. I saw there today what
been nursing a swollen right ~~hand~~
hand which has kept him from
leaving the fire + hot water necessary
to keep the swelling down.

Nov. 2) The new hunter today brought in a fine adult serow which he had killed yesterday. The dogs surrounded this one & kept it at bay on a cliff where they shot it but no dogs were injured by the serow. The animal was without fat except on the intestines. The stomach contents was chiefly the pods of a crucifer, long & slender, leaves of a pinnate bush & some blades of a broad grass. There were no maple or aspen leaves in the stomach like the 1st specimen contained. It rained quietly all day & most of the night.

③ Today the weather was fine & clear but with a strong breeze from the south. The mountain stood out sharply, the peaks a dazzling white & every crevice was sharp cut. The traps yielded only a few common mice & shrews. Carnivores seem to be quite absent here without any apparent reason as mice are abundant & there are fields & domestic animals to

~~attracted them~~

Trees & Shrubs of Secon Meter
Timberline Camp, 12,000 feet
to base 9,000 feet.

1 Spruce - Picea

The most abundant tree
at the base, 9,000 - 11,000 feet range.

2 Larch -

A few seen at 12,000 feet
in bamboo thickets.

3 Fir - Abies

The prevailing & only conifer
forming forests at timber line.
growing in dense pure forests often.

4 Pine - large coned

An abundant tree on the lower
slopes at 9,000 feet often forming
forest of straight graceful trees

5 Pinus murrayana - Small coned.

Common on the lower slopes
in forest, usually scrubby & much
swept.

6 Juniper - Tree

A few trees seen at base of mt
but perhaps planted there

7 Juniper - scrub -

A common prostrate shrub
from 9,000 feet to timber line

8 Juniper - Sequoia-leaved,
a few small trees or bushes
seen at 12,000 feet on ridges.

9 Maple -
A common tree at 9,000-10,000 ft.
near creeks + wet spots.

10 Oak - live -
Abundant + forming forests
at base of mtn. on rocky hillside
at 9,000 feet.

11 Ash - ?
A small tree with pinnate
foliage scattered thru forest
from 9,000 to 11,000 feet.

12 Rhododendron - Tree -
a large tree like form seen in
groves at 13,000 feet amid
a bamboo undergrowth

13 Rhododendron - shrubs -
many small species seen at
all elevations.

14 - Rubus - red berries -
Common in meadows at 12,000 feet

- 15 Berberis blueberried
Abundant at base of mt 9,000 ft.
- 16 Green thorn - white flowers
a common bush in hedges
+ waste ground; in blossom
- 17 Rubus -
a blackberry bush seen
at base of mtn + up to 10,000 ft.
- 18 Viburnum
Common tall bush fruit
ripe, color red. October
- 19 Salix -
a large leaved species seen
in bushlike growth at 12,000 feet
lower.
- 20 Linden -
A few trees seen in the
forest near the old temple.
- 21 Elm -
An elm like tree seen
in the forest in a few spots.
- 22 Hazel -
Bushes common at base of mtn
at 10,000 feet.
- 23 Aspen
A small tree abundant in dry
ravines at 10,000 to 12,000 feet.

24 - Bamboo, Cane?

Thickets of a small species 10 feet high were met at 13,000 feet & down to 11,000 ft.

25 Dwarf Nettle, Ribes?

A small leaved bushy tree seen in the forest in many localities.

26 Scrub - Live-oak -

The most abundant shrub covering large areas on dry hillsides from base to 11,000 ft.

attract them.

(4) Rev. Kook remained with us today + told us much about the country, the monks + Tibetans. In the afternoon he took us to one of the village houses ~~so~~ where buttered tea the chief dish of the Tibetans, It tasted much of butter which is churned into it + ^{very} little of tea. Walnuts are also added + some spices. Another dish we tasted was Tsamba, the staple food of Tibet. This is roasted oat meal mixed with the buttered tea, It tasted quite good. In the morning a shepherd brought a fine ♀ black muntjac *Elaphurus* which he found dead in the forest. It was shot yesterday by the Solo hunters you doubt. The stomach of the animal contained gray beard chicken + a few willow leaves + aspen ~~leaves~~ but no grass.

The Solo hunter brought
in another old ♂ Sorex which
he recovered from a cliff by letting
a man down on a rope.
This one had brown legs like the
first & had a white nose while
the second ♂ had cream legs
& only a trace of white in the
nose. These color differences
are used as social characters
but they are merely individual.
The stomach of this one contained
chiefly white & gray beard lichen
with only a few leaves & twigs.

I caught in the traps today
another pygmy Sorex which had
its skull broken like others.
There was also a small slaty
or largeheaded Sorex in one of
the traps. Rev. Hob told us
the pygmy hunter is an independent
Solo who lives with a few family
on the mountain at 2000 feet where
they live solely by hunting. They
have asked the local Moro chief
for permission to live there
but he has not yet granted it as they
are outcasts from their own territory.

Birds

- 1 Raven -
a common bird from 9,000 ft to
timberline
- 2 Brown Kite
Common near temple as a
scavenger.
- 3 Lammergeier -
One seen near old temple
- 4 Blue Magpie - long tailed
Small flocks seen at temple
- 5 Black & White Magpie
A few seen at village.
- 6 Plain crested Tit -
Several seen in forest at temple
- 7 Crested Chickadee
Many seen at 12,000 feet
- 8 Pine Grosbeak -
A few seen at 12,000 feet
- 9 Chinese Jay -
a few seen at 11,000 feet
- 10 Black & white jay
Common at timberline & down
to 9,000 feet.
- 11 Phasianus legans -
Several seen in forest & near
3 shops near temple.
- 12 Grouse -
Large gray grouse with a whistling note
seen in coveys at timberline.

- 13 Thrush Hermit
Often solitary ones seen in forest.
- 14 Longtailed Angel
Common on streams.
- 15 White breasted Tree Angel
A pair one on a creek.
- 16 Babbling Thrush
Many seen in hedges near
the temple.
- 17 Slaty Antcatcher.
Several seen in forest.
- 18 Streaked Creeper.
One seen on a fig tree at 2000 ft.

Serow skin loomed dazzling white
above us. The Solo Hunters
brought in another 2 Serow
which had whitish legs like the
second. They had skinned
the animal to save the meat
& bones for their selves. The
last Serow meat the back strap
or sirloin ~~was~~ tasted very good
quite equal to goral or mutton
notwithstanding Watson's
statement that serow is coarse
& tasteless. These animals
we have tasted ~~are~~ all old &
& should be tough etc. The immature
must be very good meat. I
shot a robin a black & rufous
bird slightly smaller than ours
They are common here. A pin goshawk
was another bird which I collected.
It is quite like ours. The large
white tailed grey or nutcracker
fell a victim also. In the
early morning I heard a

It rained in calling. In the
woods near camp I saw
several small trees of Tsigs
or ~~Acacia~~ ^{Acacia} ~~fraxinea~~ the first I
have seen ~~since leaving~~ ^{in China}.
~~Proctor~~ I went out to
Sambheishu hunting but
returned without seeing game
as the dogs would not trail
any animals. He saw bear
scratches on trees & sometimes
also saw signs. / Kokö version

⑧ Hsueh Songtsuen - Sun Mtn Village

The traps yielded ~~two shrews~~ the
first taken here. One a brown shrew like
winterline species & other a large-headed

Sorex. Saw the small tree squirrel
size of chipmunk but could not
get a shot at it as it fled when he took
one of the long tailed Blue magpies
was secured with the 22 cal. I went
out to the Black Water Creek with the
Sole but saw no ^{big} game. Resaw 2 red foxes

⑨ Another clear cold night &
bright day was our lot. The traps
produced 2 of the large rats, a several smaller
Apodemus. A returned from about down

the creek without anything or ^{seeing}
game game port.

(10) At his wife went into Lichiang
with Wan & the idiot to catch some
cheeks & get a caravan for
Chung-tien. The Solo hunters &
the old hunter went as usual
up toward the snow peaks but
secured nothing. They saw
a snow on the cliffs at a great
distance but they could not
get closer. I caught only 3 mice
& Li got nothing in his traps.
After dinner went out with the
horse & rode to Black Water
creek & set 15 steel traps where
I saw a foxes. The day was
fine & clear without strong breeze.
On the way over the ridge I saw
several herds in the forest &
several large pine-oaks.

(11) Today I secured two prizes
a chipmunk with 3 dorsal
stripes & white tipped ears and
a small white bellied squirrel
with reddish cinnamon or vent

The chipmunk was the
small squirrel I have been
trying to trap & the one I saw on
~~traps~~ two occasions. The
white bellied squirrel I secured
after quite a chase. I shot at it
as it was climbing a large
spruce tree at its base. It then
dropped round to the ground
& scampered up the side hill
into a hole in a great
limestone boulder. This cavity
had two entrances, both of which
I closed & then returned to
camp for a trap. This was
in one of the openings, leaving
the other closed. At dusk I
returned & found the squirrel
caught. This one lived near the
stone bridge & I saw it once
before on our arrival here. The
5 dead trapped for possum Black
water Creek ~~coyotes~~ were
undisturbed. I shot a Chipping
jay on the way over in a spruce
tree. I saw this species near

Timberline camp also. Two
Bulbuls were collected today
the common blackheaded one &
a long crested brown species.
The day was partly cloudy
but calm, at 10 am, while
at Black Creek I heard
a great avalanche sliding
down the mountain side
with a great roar like a
cannonade and a great
noise to the west of Verden.
A coolie came into camp at
2 P.M. from a at Lichang with
bearing a pack of oranges. As
he entered the red suspiciously
the red dog rushed from under
a bush and jumped & attacked
his heels. He was pulled away
runs but in 2 jumps a
black dog attacked him from
from another bush & this
brought him up with a jerk.
He fell backward not trying to
stop with the dogs on either
side & the Holy Chief drove
him away & rescued him.

Frightened but uninjured.

(12) The morning broke partly cloudy but no rain fell during the day. The steel traps yielded no foxes or other victims but the live traps produced 10 rodents + one shrew. I crossed the Blackwater creek the valley of which is composed of a gray green slipping of shale with black boulders in the bed. I set 3 more steel traps across the runs near the 2 huts. The swales here are farmed dry. The second growth trees are chiefly aspen + dog-wood. Met many farmers on the road returning from Chicago loaded with large bundles, perhaps

(13) The day was cloudy but no rain fell. The mtn summit was veiled in clouds + mist all day until 5 P.M. The steel traps were a failure again today. In the traps I caught one of the white bellied squirrels + a small gray *Citellus*.

also caught the 1st for this
camp. Shot a ♂ chipmunk in ^{at} the
tree at upper meadow. Saw one
other on a pine oak but it escaped.
The old hunter + also the new one
returned without any game + the
bad tale of 2 lost dogs. The dogs
are still out. The white pine
(P. Armandi) is abundant
here. Have seen places near the
villages north of Li Chiang where
the cones have been broken open
for extracting the edible seed.
These are as large as our Reddies
or Pinjon. The tree is abused
for torchwood which is obtained
by blazing one side of the trunk
thus stimulating the flow of resin
+ later strips of the wood as the
split split are cut out + used
as torches being then loaded with
resin. The common black pine
is similarly treated also.
(14) It rained a little during
the night in the morning it remained
cloudy. On the way over to

the steel traps on Black water
I shot 3 of the white bellied squirrels
+ one chipmunk. Both of these
species are wanderers in habit
for they were seen in places + on
trees where I had passed
many times on other days without
seeing any. On the way down to
B.C. near one of the forest ponds
I saw a pair of Amherst Pheasants
+ shot the ♂. I first heard them
walking thru dry leaves + then
saw them running along a
slopeside. The one I shot was
shot in heavy hemlock forest as
it ~~flew~~ by alight on the ground.
The Hsueh Shan Chang hunter
returned without any game but
the Jolo remained out. At this
party are still in Lichiang.

(15) At 5 P.M. it started to rain
softly + continued until
noon. I then went over to

The traps set on Blackwater
Creek mounted on the brown
mare led by the Hsien Shun Chang
hunter. The mare is an ^{untrained} ~~untrained~~
foal which attempts to
scale cliffs & trees on occasion
when being guided over the ^{land} ~~land~~
She is a very domineering squirrel
& hangs about camp unfettered &
comes to the mare when called.
The steel traps contained nothing
as usual & a large one was stolen
by some small shepherd boys whom
we found nearby but they denied
any knowledge of the trap suspect.
On the way back I shot one white
bellied squirrel on a large rock in the
forest where two were playing
together. The hunter pointed out a
thrush which I shot in the large
meadow & shot a streaked thrasher
like thrush. In the morning I
cleared a winter worn in my
mouse traps & a woodpecker with the
22 near camp. A + his son returned at

sunset but the caravan is to follow on the 18th. Kellogg's mind is still to come having been sent by parcels post undoubt.

(16) The day was cloudy & cold but calm. The traps set for carnivores yielded nothing except a babbling thrush. Two squirrels & chipmunks were seen owing to the rain weather. I shot a *Phasianus elegans* today in the fields at Blackwater Creek & saw another at the summit in the pine forest. Both solitary birds. The hunters returned today with a egg of Goral the size of my specimen.

(17) We endured another cold cloudy morning but in the late afternoon the sun came out. The steel traps produced nothing & were taken up. In the mouse traps I caught a long mounted shrew like the species ^{found} at Timber-line Camp. I shot a new species of woodpecker a small very breasted black breasted one. Saw another, a large green species.

The caravan came in late with
W.M. At Black Water Creek
saw a pair of Amherst Phalaropes
in the edge of a field but
failed to hit ~~either~~ ^{any}. They ran
into the bamboo ^{canes} when fired at.
(18) We took breakfast before daylight
+ then packed our outfit. The morning
was cloudy at camp with a light
rain & a fine rainbow at base of
the Snow Mtn. We got away at
9 A.M. The climb out of Black Water
Creek was very long & high, the ridge
here being about 12,000 feet. After
crossing this summit we descended
thru magnificent forest of great
hemlock & spruce trees draped
in long gray beard lichen. The
undergrowth was cane & several
bamboo with some fir & oak
briches. In openings a small ^{deciduous} ~~oak~~
tree with ^{leaves} ~~leaves~~ small dry pods was seen.
I shot one chipmunk near our lunch
place. There was no bird life in the
forest but Microtus runways & holes of
mammals, about logs were very abundant.
We ^{made} camp at 5 P.M. in a fine day.

pine forest on the side of the mtn,
at about 10,000 feet altitude. The
weather was cold but without frost,
(19) The traps I set about camp
contained Microtus & small Apidemus
only. We broke camp at day-
light & descended thru pine clad
mountain side to the Yangtze
at Tahn. The pine forest was on
dry rocky soil with some large
leaved Rhododendron trees & ~~some~~ ^{lean}
oaks. Streams of small size were not
often, a few of the Rhododendrons
were in blossom, breaks no doubt
held over from the spring. We

reached Tahn village at 12 & the
ford at 1 P.M. The Yangtze valley
here is a wide oval the river being
bordered by broad alluvial plains
of fine whitish soil. The river flows
in a deep channel 200 or 300 feet
below the plain & breaks thru the
Sun Wu Range in deep gorge
where it ~~is~~ enters the valley
immediately below Tahn. It
enters another deep rocky gorge.

The soil on the valley sides is devoted to maize & in the valley where irrigation is practiced it is devoted to millet chiefly with peanuts & some rice. The climate is warm & mild, the altitude being 6000 feet. The flora & fauna is like that of Yunnan - many on the edge of the valley I saw many black & white magpies, & one Tropicbird in a hedge. Three villages on the plain. The largest T'atun of about 300 houses & 2 temples. The inhabitants look like Moslems & their houses are ^{similar} after having dinner on the rim of the gorge we descended with our baggage & trunks to the boat landing below. Where we arrived at 3 P.M. The boat was a small ~~stiff~~ ^{downy} shaped affair holding 2 men, 4 ~~men~~ & some luggage each trip. Two Moslem Boatmen managed the craft. The crossings between sheer cliffs of a reddish or a brown color which rise about 200 feet. The boat is fast down by a rope along the shore & the cliff side by one of the men climbing monkey like along the

cliff. Then he jumped to the
boat & it is pushed off into the
current, which is ~~about~~ ^{for}
10 miles an hour. The boat
slides down & across stream &
floats with gully among
great boulder boulders. Here
in landing the ~~boat~~ ^{boat} ~~boat~~
ran aground on a boulder and
the head boatman stepped on
the rock which was under
below the water's surface & pushed
the boat off again. We then all
scrambled up the steep trail
which wound amid gravel &
boulder deposits up the steep sides
of the gorge. Getting the men
into the boat was attended
with difficulty. They refused to
jump or even sit on the ground
until forced, pushed & finally
lifted in ~~boat~~ by the forelegs.
We got half our outfit over by
5 P.M. in 4 trips & then the 2
boatmen refused to work any longer
until the morning when we made

camp, with what few things we
had set traps in a millet field
on the river bank.

- (20) The 2 ferry men failed to get
more than half an outfit across the
river last night so we had to
remain in camp all day until
the mules & boxes were ferried
over which required until nightfall.
Our rat traps secured a gray *Crocidura*
several *Epinus* (small) & many
large gray rats similar somewhat to
Epinus *alepandrinus* in proportion.

- I caught both this species & *Epinus*
in the closed daytime. About our
camp which is in a millet field
are many mine tunnels in the sandy
shoulder strewn hillsides done by
Chinese in search of gold no doubt. The
rock formation here is andesite lava
with limestone & conglomerates in
places. The trees & larger bushes have
all been cut down for firewood near
the river but on the upper sides pines
far above town in abundance.

- (21) During the night we had a little
rain. At daylight we packed our
outfit & got started up the long hill
from the Yangtze at 8 AM. The road
followed the Yangtze valley for the first

4 hours or until noon. We stopped
for dinner at some huts situated in
corn-fields. Here there were about
4 families, some cattle & goats. The
people appeared very poor & the children
^{more} dressed in rags. One little girl about
5 yrs old was entirely naked &
associated with the other children
unconcerned. It was quite cool
at this altitude, 8000 feet but this child
didn't mind it. At this place
the soil was bright red & the
country pine-land. Fraxinea or it
was bushy, a yellow fruited
Holly was seen, also red fruit
winter-green bushes. Several
gentians were in blossom of a
light blue color. A very small
leaved, thickly spiny species
of Berberis was common also. In
the afternoon we followed a
lateral valley & climbed up thru
the cultivated fields of dry corn
stalks, turnips etc to its head
at 10000 feet where we camped at
the spruce forest above which rose a

Mammals of Peh - Ksui, Snow Mts

1 Sorex - brown

4 Secured in forest. ^{lower limit} of range.

2 Sorex (large headed)

A single one trapped under logs.

3 Crocidura (gray)

(One only taken in forest.)

4 Shrew (proborcis)

A single one secured the last day
from stay, lower limit of range.

5 Capricornis -

Unskilled by the Lolo Hunters
Tracks seen in high forest near
base of snow peaks but none in dry
forest near camp.

6 Hemorrhadus

The old hunter went out once for
goral & shot a yg ♀ on cliffs at head
of Peh - Ksui Creek. No others seen.

7 Sciurus (white bellied)

Six secured near camp, shot
in trees & on ~~the~~ rough limestone
rocks in forest. One caught in
rabbit trap set at brown at base of
a spruce tree. This species very
timid & seldom seen, only one other
specimen seen.

8 Tania

3 Shot near camp in crabapple
trees when feeding. One seen on
side of lake. No others seen. Usually seen

associated with flocks of small ^{brush} birds which it resembled in actions.

9 Apodemus (giant)

Many caught in forest under large ^{logs}

10 A. (long tailed)

Also common in forest.

11 A. (large-eared)

common mouse in forest

12 A. (short-eared)

many seen, chiefly ^{young} +
doubtless ^{young} of last species.

13 Microtus (alpine)

Many burrows seen in meadows
everywhere but seldom caught in
our traps.

14 Epimys (small)

a few secured in forest but not
common here. Upper limit perhaps

15 Vulpes (red)

3 seen by A. at various times
but none came to our steel traps.

16 Ursus - (Himalayan Black)

trilled with dogs but none found

A saw sign (trees scratched + dung)

but not much anywhere

Peh-hsui-White Water

The camp was situated on this
creek at 10,000 feet altitude
about 4 miles from the base of the
Sierra Nevada Peaks. Here the stream
runs in a rather deep V shaped
valley the sides covered by forest of
pine, spruce, & hemlock & larch.
The creek bed is wide & shallow
with an even regular descent &
no rapids here. The bed is covered
by light gray or whitish limestone
rock which has given rise to the ^{many}
in places where the forest limestone
ledges & boulders occur. The soil
on the meadows is black & brown
Trees -

Trees -

- 1 Spruce -
Commonest tree.
- 2 Pine (white) Amnandi
A few seen everywhere, much less.
- 3 P. (black) Massoniana
Common on the dryer hillsides only.
- 4 Hemlock.
Seen chiefly in Black Water in
moist spots.
- 6 Larch
Common with spruce on moist
slopes. Turning brown.
- 7 Juniper dwarf - prostrate
Common on rocky open hillsides
near rocky banks of creeks.

- 8 Oak - live - trees large
Common scattered in forest.
- 9 Scrub - live Oak, leaves spiny
Most abundant shrub on open hill^{sides}
in dense masses.
- 10 Scrub - live Oak, tall smooth
Common in forest as understory.
- 11 Aspen -
Very common in clearing ^{and} ~~and~~
growth! Leaves turning yellow
- 12 Plum (spondylos) ^(spondylos)
Common in meadows, fruit still
on but leaves shed.
- 13 Apple - crab.
Common tree bearing round yellow
fruit, leafless
- 14 Apple - large green.
A few trees seen on roadside.
- 15 Cane - Bramble - ^{slightly}
Common under growth on moist ^{places}
- 16 Rubus - white stemmed -
A few seen.
- 17 R. red stemmed
Not many seen.
- 18 Bush - Blueberries -
Common in clearings
- 19 Brakes - Common on meadows dead ^{trees}
- 20 Hypericum - A few bushes seen.

Birds of Peh-hsu

1 Kinglet. 17 or more

Most abundant small bird in bushes

2 Chickadee brown, 7 or more

Very com. in flocks in bush, not complaining

3 Chickadee, crested

Flocks seen in pines

4 Nuthatch - slaty

Several seen in forest

5 Creeper - streaked

Rare

6 Tit - Plain crested

Several seen, not com.

7 Bobbling Thrush - gray

Seen in flocks in bush. 1 stuffed.

Caught in traps also

8 Blue Thrush - large streaked

Several seen in flocks, 3 shot

1 caught in net trap

9 Robin - stuffed

abundant, 3 caught in net traps

10 Ground Thrush - blue trapped ^{stuffed}

11 Olive " " shot, stuffed

12 Varied " " shot

13 Wren, white

Several seen, one caught in trap

14 Sparrow, brown

Several seen

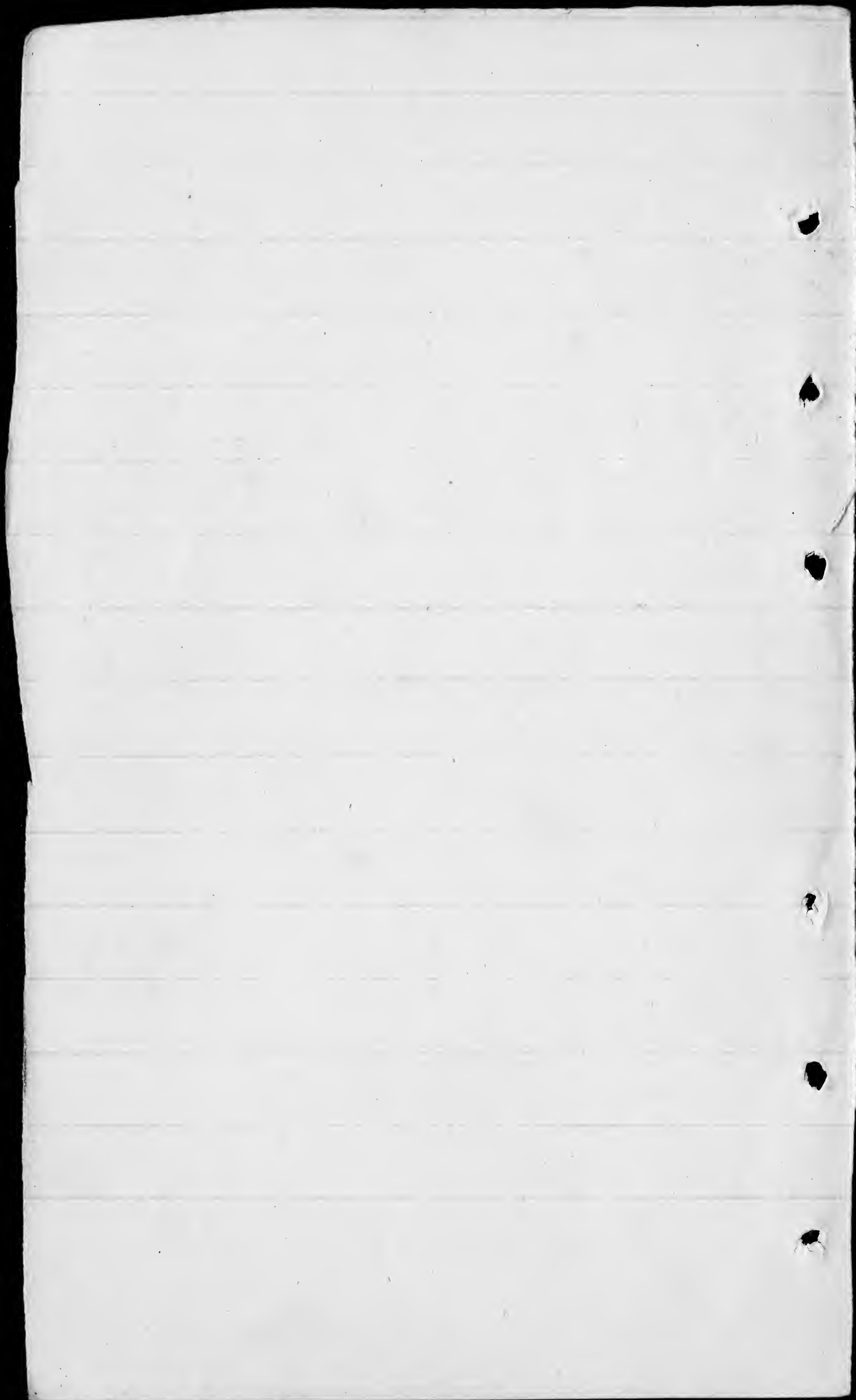
- 15 Bullfinch -
One shot, only one seen
- 16 Finch Rosey
Several seen in flock
- 17 Grosbeak
One shot
- 18 Oriole Rufous
One seen on bridge on creek
- 19 Bulbul - Black headed
Very common in flocks, feeding
on crab apples
- 20 Bulbul - Crested
Common with last species
- 21 Nutcracker Blk + white
Several seen, one stuffed
- 22 Magpie - Blue, longtailed
Many seen in flock, 3 stuffed
- 23 Raven - 1 stuffed
Common in pairs
- 24 Jay - Chinese
Several seen, 1 stuffed
- 25 Woodpecker - 2 stuffed
Red vented
Three seen
- 26 Wood. Redbreasted - 1 stuffed
One only seen
- 27 Wood. green - large
Seen once only
- 28 Pheasant Amherst - in forest
- 29 Pheasant elegans 1 shot 2 seen ⁱⁿ culture

30 Owl -
head bawling at night only

31 Eagle - Black -
seen twice flying

32 Hawk, goshawk 1 seen

33 Snipe - Jack
One seen at creek



in Szechwan. The village
hunter brought in a fine
^{half}amberst Pheasant (*Chrysolophus*
amberstiae) It is a beautiful
pheasant, very graceful with a
tail 3 feet long & is the finest
species I have ever seen.

- ⑤ The night was very cold & clear
with ice on all standing water.
The traps contained another pigmy
Sorex which had its snout broken
by the traps like the other 3. We broke
camp at the temple at 9:30 AM.
with 8 loaded beasts capable of carrying
only half our outfit. Ben Koh was
there to see us off. The village boys
brought back a few small mouse traps
which they had stolen but no large
ant trap which they ^{stole} ~~value~~. They are
all clever thieves & never admit
any crime. The route over lay
thru the upper part of the Szechwan
valley which is thickly carpeted
by scrub oak & strewn by
gray limestone rocks worn
into all sorts of shapes. The pass
was low & pine clad. The ground
covered by rough limestone. In 3 hours
we reached Saichien, a narrow
grass covered meadow, dry & surrounded
by pine forest. Beyond it rose the

more water, the range being visible for many miles.

~~From~~ A small or rather short glacier was visible high up on the side of the peaks. From Lander's we descended by wooded ravine to the white water or hind water stream. The

ravine has a great variety of trees, white birch, aspen, larch, spruce, aspens, pines, oaks, (like chestnut) plums, etc. We made camp near the stream at the bottom of the creek.

~~Reservoir~~ (white water)

⑥ The night was very cold with ice & frost in the morning.

The water at night shown hard & white. A man hunting with dogs & old hunter but he saw nothing. Bear sign was very scarce. The Elaphodons had very large lachrymal glands & hoofs glands only in the hind hoofs. ~~Yesterday~~ The traps yielded only a few Agrodontomys of two species.

⑦ We had another bright cloudless day in which the

great Sumatran. similar to the
one at Lichiang. The lower part
of this valley near the Yangtze
was certainly hundreds of rice
terraces but the upper part was
devoted to maize & millet. The
valley rising steeply giving it
a cold climate. The village
at camp is called Ha-pa.
There is no definite village
but houses scattered in fields.
The inhabitants suffer much
from gonorrhea & also an eye infect
ion which swells the lids &
nearly closes the eyes.

(22) We spent the day at
Ha-pa as the country
looked favorable for game.
We went out early with 2
local hunters & their 5
dogs but the dogs were of
no value & we saw no
game. One rabbit was seen
along. Tailed Squirrel, 1 Brown
Squirrel, one silver squirrel (new to
collection) & a light squirrel.
Two other (Lichiang) species of
Lepus. No other species.

The day was perfect but
cool. I went about inside the
kents. A hard frost visited us
in the night. The forest here
consists of very large trees
chiefly beech with some
undergrowth & moss covered
ground. Saw a new blue
Wood pigeon. Bears are said
to come into the corn fields here.
Saw some of the residents with
coats made of animal skins.
One man brought 2 black
muntjacs (*Elephas*) to sell.
Mole runways are quite com-
mon here in wet meadows.

(23) The night was cold
& I came with heavy frost but in the
morning breakfast on the deck
with a last gentle snow hanging
above the horizon. The morning
The traps with 1 more made,
3 Sorex (long headed) 1 Sorex (brown) &
Microtus & Apodemus.

The road led across the valley
& out at the north side, most
of the way was through dry
pine forest without under shrubs,
birds or animals generally.

This pine (*P. monosperma*) is
characterized by a yellow opening in the
trees the bark being, large
mouth, light brownish-red in
color. Many of the trees were
very slender maturing poles
like the lodgepole pine suitable
for teepee tents. Small villages
in cultivated valleys were
found far between near the
Yungstze which we followed in
a general way. The day was
absolutely clear & less & calm
but cool except in the sun
at noon. We have abandoned the
oil stoves & use charcoal in this to
heat up the tents at night & find it

warmer & more convenient than
bermese which is of poor quality
here & lasts only for a half hour or so

After dinner we went two hours
further to Peh-te where we camped
in a deep ravine near one of the
villages. This village is situated
in a deep valley on one side and
out of plateau. The land is terraced
into narrow terraces for rice culture.

(24) Spent the day camped at
Peh-te looking for hunters to
assist us. A went up the ravine
to inquire of a famous Tolo hunter
~~of the~~ who lived on Burned Mt.
of his traps captured only a few
Thomomys monaxicus, & the common
small Thomomys & a few small
Apodemus. Day clear &
bright & really hot at noon
when the direct rays make
what necessary. Altitude
not more than 8000 feet going
from rice fields & bent. I
checked up the mammal
collection today. We have
950 specimens, 75 species &
50 genera.

to Hua Shan (Fire Mountain)

(25) Today we moved camp ^{up} the valley 5 hours to the forest near the summit of the ridge where both the Chinese & Solo hunters live, we passed thru 2 of the Pehiti villages just after leaving camp. On each side of the road were ricefields or rather rice stubble the cut of rice being hung on vertical rocks in the village to dry. The inhabitants stood at attention during it was. Many of the men wear shirts instead of trousers & some of the small boys were absolutely nude. Many of the men had long hair in shape of a queue. The way climbed steadily, and at our upper camp were 10,000 feet I suppose (2000 ft. above villages of Pehiti) corn fields & scrub country bordered the road most of way until we reached camp where oaks & pines appeared. Saw many maples still in leaf on roadway. ~~We~~ camped in a meadow surrounded by Chinese pine forest, dry & without underbrush. A creek near camp had many hemlocks & some white pines growing near.

(26) The night was clear but without frost & quite comfortable.

in the morning. We arose at 5:30 AM.
in the dark + ^{took} breakfast as usual
in the open beside a large camp-fire.
The stars were shimmering brightly.
In the N.W. Orion was just setting +
in the northward and high in the sky
hung the great bear with the two pointers
indicating the polar star which was
just visible above the fringe of pines on
the hillside. Our catch of 70 traps
consisted of 1 Mole, 3 Microtus, 6 Spiny
(small) 10 Apodemus (small) 4 A. (big) + 1 A. (giant). These two latter species
apparently cross the Yangtze. Every
species of Ichthyophaga, seems to cross
the river which is here a barrier.

(27) The camp has proved very
windy; gusts of wind come from every
direction at intervals all day + night.
A went out again today with the
local hunter + their dogs but the
wind made so much noise in the
trees that the dogs could not be heard.
He saw nothing. The traps
secured the same species as yesterday
plus the large headed Sorex. The animal
which devoured so many mice in the
traps is the long tailed Apodemus
of which were caught in the same traps.

Today, & no mice were destroyed, the mail
(28) direct from America arrived today
by runner.

We broke camp at 8 A.M. & ascended
the mountain road to Hsin-chung-
tien. The road was much obstructed
by fallen trees for the first 4 miles
then came thickets, spruce & oak woods.
After we ascended above this zone
we reached the alpine where only
fir trees with Rhododendrons made
a clean forest without underbrush.
This sort of growth lasted to the top
of the pass where we camped at 2 P.M.
Here there were open meadows of grass
& flat areas of Rhododendron brush
with firs in the ravines only.
Birch trees were seen with the firs.
Here the Rhododendrons are
heavily draped with black beard
moss instead of gray which prevails
lower down. The altitude is 13,000 or
14,000 feet & the ground is frozen
hard & in shady places there
are snow banks & ice. No
game or birds were seen on the
way up. Rabbit pills & Microtus
remains are abundant near camp.

(29) The night was cold with heavy
frost which froze the tents stiff.
The traps caught some 20 Microtus
of an new form with white bellies. Three

Small brown *sorex* were also secured,
We were surprised to get no *Apodemus*
or *Eprinus* at this elevation. Very
few birds were seen here, only a
blue wheatear & a few larks on
the grassy hills. We broke camp
at 9 A.M. & crossed the pass which
was bordered by snow banks on
the north slope only. The road
dropped steeply down the mtn.
side thru open grass slopes & fir
forest. At 11,000 feet the bamboo zone
was again encountered & pine & oaks
appeared here also. This
forest lasted to the village of
Tung-gan-sho, composed of adobe
huts. It is a recent affair
as all the fields were filled by stumps
of the forest trees felled to clear
the land. No Chinese or other tribes
live here. One of the residents is
hunter & offered to go with us to
morrow hunting *wasp*. We
made camp in a ravine at the
upper end of the village.

(30) Our traps at Tung-gan-sho netted
about 20 mice, chiefly a robust short
tailed *podomys* new to us, also a

small *Microtus* new or the same
as alpinus, a long tailed Shrew,
a large *Microtus*, & prong (small)
We broke camp & travelled down the
valley where we met a telegraph wire
& the main Chung-tien road
which we followed upstream
for 9 hours & camped in an
open meadow in the forest close
to the road at noon. The Chung-tien
River flows in a deep gorge, pine &
spruce clad. From the road
which runs high above it the water
looks beautifully turquoise color.
Six solo hunters & 14 dogs
accompanied us to hunt
while we are camped here
where rapids are said to occur.

Dec. 1) The morning dawned cloudy
with a few flakes of snow
falling. The traps yielded another *Blarina*
a brown & a large headed *Sorex*, also many
small *Apodemus* & a brown *Microtus*
Many Tibetan caravans pass the
camp some of them with pack oxen
of large size with balanced saddle trees
instead of the Chinese type. Each ox
had a large ring in its nose. The
name of the ~~camp~~ ^{nearest} village is To-mu-

white Peih
north Pei
snow Hsueh
water Hsin
mountain - Shan
black - hei
red - hung
east tung
west hsi
south - Nam

Tsai-Hoa

Little Hsia
plain - Kien
spring - tung

Mammals of To-mu-lang

9

1 Hemorhachius -

Saw 2 on cliffs above river where trails & dung, was abundant.

2 Peromys (red)

Saw to ocean, hole killed in July.

We saw dung in only one small ravine & no new tracks anywhere.

3 Lepus -

Seen everywhere on bushy & grassy hill sides.

4 Silver Mole -

A caught one specimen in forest.

5 Blarina -

A caught one under log in forest.

6 Sorex (long-tailed)

A caught one in forest.

7 Sorex (brown) several caught

8 Apodemus (robust)

many caught in forest. new

9 Apod. (small) abundant

10 3 species (small)

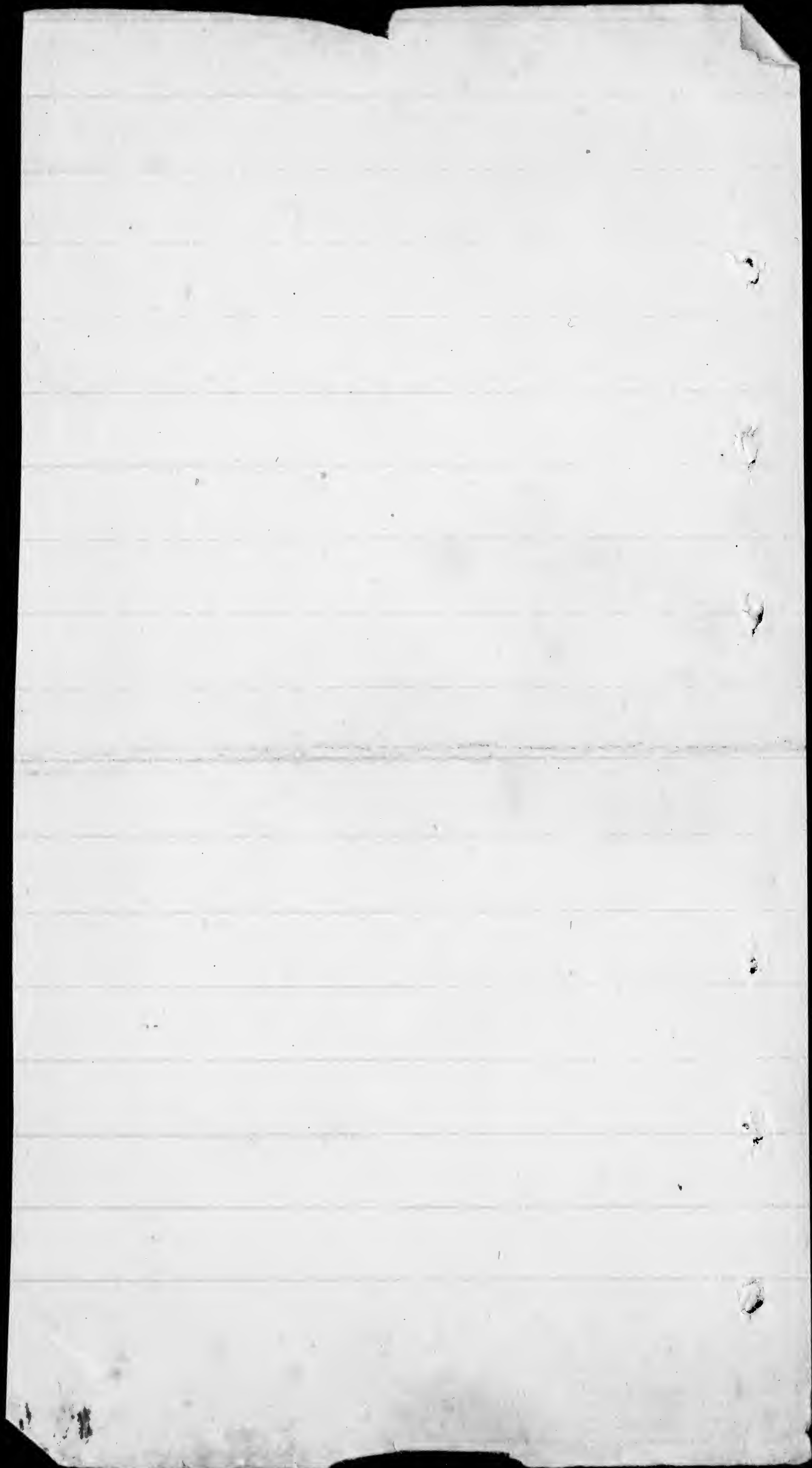
11 Microtus (alpinus) common in meadow
12 Microtus (himalayan)

10

No.	Sex	Name
13	Canis	One seen in the near camp
14	Vulpes	Foot sign seen on cliffs.



Hsueh Shan Chang
2 Peh Hsueh
P



bluffs 3000 feet above the river where
A had gone on the 1st Dec. No ^{human} tracks
or dung were found a very
evidence that they occur here
until ~~we~~ about 3 P.M. far below
camp several patches of deep black
fills were found in brush & brush
hillsides not far above the river.
The few tracks here were very old,
perhaps 2 months old made
undoubtedly by a single animal.
The cliffs however yielded much
good sign, dung, tracks & trails
were everywhere in rocky places
& 2 good ones seen. The first
one I saw with the glasses at
6000 yds. far down on a cliff below.
Was the hawk but its back appeared
quite black & was not the nearest

protective gray as viewed from
the side. It was so far away that
the 2 Mosses could not see it.
I fired hammer 3 times but hoped
to drive it up hill. At the shot
it seemed puzzled but made
no quick movement, simply took
a few steps slightly upward & behind
and off out of sight. We made
down down to the position first
approach but could not find it although
we took lunch break & waited a
half hour. Later about 3:30 I
jumped a large goral on a round
rocky cliff which bounded away
at 60 yds. I took of right before
could get my rifle from the gun
beaver. No evidence of serows
bears, or muntjacs was seen in
the whole day's tramp. Rabbit hills
now everywhere in bushy hillside.

but no rabbits were seen. I saw fox
dropping on one of the rocky points.
The men are failures as still they
hunt only with dogs ~~which~~^{on}
which they depend. They do not
use their eyes to see game or
go quietly or pay attention to the
wind. I was much hard to flesh
without dogs as they lay very
close. The last one we jumped
we first fired shot at the base of
the cliff perhaps a 100 yds from
it to frighten any animal
but this had no effect. It was
only flushed when we approached
within 60 yds. it had no ^{real} effect.

(4) We broke camp at 8 AM.
the ground covered with snow +
snow laden spruce trees on the
hillsides. The landscape at
camp looked beautifully white
but the sidehill facing south

where the sun shone warm were bare
observed. I saw only a rabbit
tracks & a few rat & squirrel tracks
in a stretch of 4 miles on the road.
The sun shone bright & we met
many Tibetan caravans on
their way to Chung-tien. North

of the men were large & strong of
build, wearing like boots. Their
animals were loaded with stone
sacks carrying grain, etc. The
few pack animals were men led
mainly mules & horses were
in use. At noon we stopped ~~at~~
the summit of a pass. The ^{west}
side of which was covered &
muddy white the south face was
dry & warm. The road even here
dusty. We made camp at 5
P.M. on a field well above the
Chung-tien River in a field no
pine forests were seen here only
myrtles & Oaks. Elevation 8,500 feet

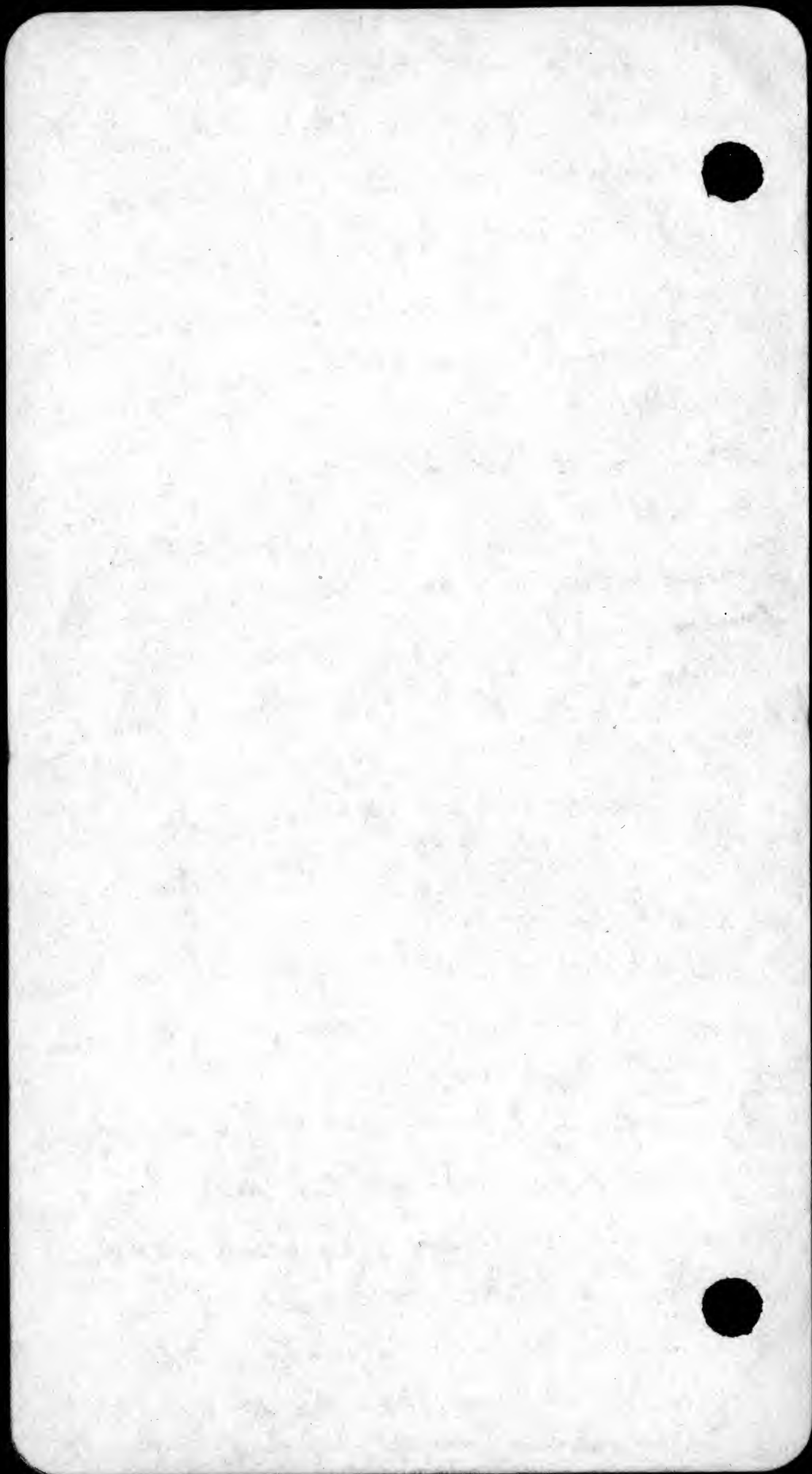
⑤ The night was clear + moonlit but not ^{very} cold. The traps yielded 2 *Citellus*, 6 *Apodemus* + a large *E. pump* (new). At 7:30 A.M. we continued our way down the river the road running high above the valley floor + winding up each side ravine + down over the tributary streams. The valley is a deep V-shape with vertical faces here & there hanging high above the river. In some cases the ~~the~~ houses are built on such steep slopes that one side must be propped up by posts. Day bright + sunny but not hot.

⑥ We camped last night in the gorge at La-m-bu Ferry. Our position was on a old terrace high above the river + near the village. The river here is wide + sluggish with a 2 mile current. Down the river ~~was~~ a grand view of the gorge with the ~~Summit~~ ^{Si-y-poo} Range looming up on either side. This gorge must be about 8000 or 9000 feet deep. The river here is clear without rapids as far as we could see. There is a distinct light blue green & very deep the

banks sloping rapidly. Sand
spits are few, if the land is all
• steep is narrow & terraced.
A boat was spotting on the lower
but in summer rice is supposed to grow.
The night was cold & frosty much
colder than when at Tchou. The
catch consisted of several 3 prong
small & very gas filled.

Modons or geese were seen on the
river. A flock of 3 large gray cranes were
seen in a field of grain feeding.
Our route during the day followed
the river. The background is
pine on the hills with chestnuts on the
slopes near the river. It has been
still retained their dark brown
about houses were available & pine
cork poles.

⑦ Last night we camped opposite
A-hsi on a hillside far above
the river on a grassy flat with
• pine trees above. The
river here was wide with a
great sand bank on one side
opposite a large eddy. A flock



4 mallards were feeding at
this point in a tide rip caused
by the currents. We set no
traps as no hedges with runways
were nearby, the cultivation &
village being on the opposite shore.
The night was calm & without
frost with a cloudy weather.
We broke camp at 7 AM soon
after daylight. A few li from
camp I met a pair of 3 cranes
in a field which ~~was~~ stood ~~gazing~~
at each other. I ~~discovered~~ ~~shot~~ ~~gazed~~
fired at one but shot too low
& broke only its leg near the
hip. It flew away with the
others. Later I saw a pair of
brown geese. Just before reaching
Shik-shu ferry I shot & shot at
3 cranes in a wheat field &
killed 2 of them as they stood in
line. One was a black headed
The men were very excited
to see the birds & came
to pick up the birds at great
speed. We reached Shik-shu ferry

at 10 AM we crossed over in a
large boat rowed by 2 men.
The river from A-shi to
here is lined by sandbanks a
feature not seen previously.
The valley ^{level} here is also much
wider with wheat fields
bordering the river.

- ⑧ Gold Washing was in
progress yesterday a few
miles above the ferry. The
washing was done on the
surface of sand bars instead
of by digging to bed-rock. The
sand was carried in basket
to a large shaken basket where
the sand was washed with water
& run down over a round stone
board while the large pebbles
were cast out by a man who
tipped up the basket after
shaking the sand thru it. We
saw spots of gravel & ~~pebbles~~
diggings on several bars
of the Yangtze reaches a sharp bend
at Shih-hu, a hair-pin turn.

We made camp at 3:30 at
TA-MON-ho. The night was
cloudy with a few rain
drops. Insects met many
large Pachyura, Eponys (mice),
+ E. norvegicus, one Microtus (chipmunk)
Quite a number of caribou were
seen in fields as plowing; these
are the first we have seen since
Lichwang. The cattle here are
without humps but much
like Indian ones in size. The
valley is given over to rice
fields nicely terraced now
planted to wheat in winter.
On the way we saw a pair of
great lamergoyers, some large
mergamers, & several flocks
of cranes. The people seen
in the villages are all dressed
in blue serge, no other color
being in evidence, & many of
these people are all moros

Just at all Chinese in feature
but rather good looking
with large eyes & small nose
~~mouth~~ & red cheeks. A
very few Tibetan are seen
and the road dressed in short
boots with whitish red & blue
in their clothing. A rain
shower visited us in the
afternoon & evening. We made
camp on a level spot in
a grove of oaks on a bluff
above the river. The people
in the valley are numerous
every bit of land being
cultivated & villages numerous.
They do not however make
use of the wide deep river
for navigation or transport.
Every thing here is carried
on the backs of men or women
or beasts. Everyone is
with a basket strapped to their
backs by a rope around the shoulders
or forehead.

① We made camp last night at ~~the~~
~~San-hai-tzu~~ at 4:30 in a drizzling rain
under a fine grove of large oaks on the
river. Yesterday while eating tiffin
I witnessed a battle between
a raven & a ^{black & white} magpie. The raven
was pursuing the magpie &
finally caught it on the sandy
river shore & ~~cross~~ attempting to
kill it. When several other mag-
pies came to the rescue & beat
the crow off when the wounded
bird escaped. The ~~crow~~ raven remained
on the sand & the magpies close
by scolding but neither species
seemed to fear the other. What started
the fight we could not determine.
We broke camp at 7:30 in clear weather
but a cold wind blew down the river.
Many geese were heard calling. & 2
parties of 3 cranes each were seen. These
two seem to be ♂ & ♀ which are colored
alike & a egg of the year which looks like blood.

head. A few flocks of half dozen
~~were~~ seen, but they are unusual.

After tiffin I shot a ♀ Mallard from
a flock of 4 and I shot another
crane from a flock of 15 which were
standing on a gravelly bar of the river.
The one I got was wing broken but the others
did not return to its aid. It first went
into the river a few feet & then turned
back to the bar & climbed up a steep
embankment to a field where I
chased it at a high rate. It could
run with great speed but was impeded
by the trailing floppy wing. It hopped
on with bill & feet when I got near.
& a lot of ravens gathered about & cawed
loudly during the fight. We reached
Chi-tan where the road to Wei-tai
leaves the Yangtze. Here a large stream
flows down a low valley & meets the
river at a very wide part of the
valley, a large circular flat at least
5 miles in diameter & the water
place we have yet encountered. The
two villages here are several fathoms
set to race. Orange was seen here in

fruit. Before reaching here we found
a bridal party the bride being carried
in a closed sedan chair of bright
green paper curtains it began
was resplendent in indigo blouse
& jacket, black cap & red crest.
Many villages were following with
rice & sugar for presents.

(10) Last night we were visited by
some soldiers from the village who
made an attempt to commandeers
our mules & moccas for their use on a
journey to Atunze but the moccas drove
them off with clubs. They made no
resistance & did not return. Many mules
run away were found near camp but
mules were caught. The morning was
very frosty & cold until nearly noon.
The route lay along the valley of a large
creek & then up the mountain side
amid oak & pine forest. Many travellers
were met some of them Tibetans. The
only saddle seen was the single tree Tibetan
no double tree Chinese being in

evidence. A flock of 12 cranes were
seen just after starting but none
were bugged. Many of the people here
have not been afflicted with gonorrhea
chiefly the older ones. Probably $\frac{1}{4}$ of them
are thus diseased. Atiffin we stopped
on a river-side high up at about 9000 ft.
Here only maize was cultivated. Many
walnut trees grew at the village we
stopped at. The road continued up
the canon thru hemlock & cane-
covered hills. At 5 P.M. it opened
suddenly into a wide level valley
with a higher more peaked ridge
above. This plain is ~~called~~ known
as *Li-tien*, or oak plain. Its
size is only a little less than the
Chi-tien plain. I saw a white
bull in argument & a pair of *Elagone*
patersoni growing up the canyon.
The day was clear but cold until 11 A.M.
& at 3 P.M. it became cold again.
At noon it was calm & hot but
sun hot in the shade frost remained
all day making much contrast.

~~①⑤ The night was cold & clear of the~~
①⑤ The night was cold & clear of the
Li-tien with a full moon. Owing
to the heavy frost our traps caught
only 2 *Microtus* & several *E. sinensis*. Our
camp was situated in the middle of
the valley in a meadow with corn fields
& thorn hedges nearby. We reached
the summit of the pass at 11 A.M.
& found it covered with a 6 inch layer
of snow. A high meadow filled with snow
over the pass so we had a three
mile tramp across it. The bright sun
produced an intense reflection which
~~could~~ would soon produce snow. Think
on the ancient snow many years ago
the foliage rather reddish & the bark brown
& thin. These are the first I have seen of
the genus. The white bellied squirrel was
also seen & 2 shot. The pass is marked
12,000 feet but it does not seem near
as high as the Peh-ti-one which had a
solid fir forest ^{with *Pinus* *Rhododendron* & *Abies*} ~~with *Pinus* *Rhododendron* & *Abies*~~
The trees at the summit were ^{chiefly} spruce, birch & oak

but no Rododendron forest occurred.
The maps said that they learned that
the soldiers who attempted to take the camp
at Chün-tien were simply trying to get
supplies as the supplies for Altunze had already
departed & these soldiers were remaining
behind to terrorize the country. From
the pass the whole country can be seen
westward the snow capped peaks forming
the Melong Salween divide which runs
like a wall unbroken. Eastward the
Snow Mtn. & its continuation above Hapa
were the only snow peaks visible. The
high plateau with some small fields where
Chung-tien is situated, was spread
out north-eastward. Everywhere the country
was covered by coniferous forests with evidence
of cultivation except the Li-tien valley
some 2000 ft below us. After leaving
the snow valley we found the
descent to Wei-shi dry & warm
without snow owing to the exposure to
the sun. Near the base of the mtn. we
again met with the yew tree & many
brazel-bushes & alders. We reached

Wei-shi at dusk. It is situated on
a side hill a few hundred feet above the
valley which is level & has rice fields &
a good sized stream occupying it.
A low mud wall runs about the
town but this is so narrow & low that
it affords no protection it is merely
a boundary. Our camp was situated
on a small pine clad hill near an
old temple occupied by some poor people
& their dogs. Some sharp tents outside.

(12) Most of the day was spent in
Wei-shi gathering information
about the game animals & surrounding
country. The Catholic priest, a French
man, was away so ~~was~~ the magistrate
but his record gave us some information.
We bought some 20 flying squirrel
pelts at 50 cents each. They
come from the Burma border where
they are trapped offhandedly. The
dealers said they were attracted to fires
at night & caught them. The people
here are Liso tribesmen but look like

the moss + speak a similar language.
The ♀ wear blue trousers + short aprons
+ a blue button like headress.

(13) This morning we took the road
from the town of Wei-shi + over the range
west of the place. We had a steady
climb of 4 hrs. to reach the summit
which was forested but snow covered.
Hazel bushes were predominant at
the base + further up were many
large alders on the fern covered hillsides.
A few poplars or cottonwoods were also seen
at the summit were mixed birch
spruce + fir trees. The altitude was
doubtless 12,000 feet. No game seen
on way up. As a guide we had one of
the local soldiers who carried a bolt action
45 cal. long barreled pump rifle. We reached at 6 PM
at dark a small village occupying a very
narrow deep valley. Here was the hunting
place + we made camp here in a wheat
field, the only ^{level} spot in the narrow valley.
The villagers brought wood + seemed not
amazed by our destruction in the wheat.
On the way I saw a tree with red fruit
like that of the leech but on last
morning I found it to contain many seeds of

The nights clear & frosty. On our
way down the canyon in the morning
we saw many oaks & yews, large ^{leafy} ferns
& much moss & streamlets on the
sides. The ~~mountains~~ however were not
in evidence. They are said to wander
about much & only come near the village
when the maize is ripe. The road soon
left the stream & cut high above the
rock following a water ditch. We reached
a spot near the mouth 200 feet above the
McHenry which could be seen far below
flowing calmly. Fields planted the
river sides in the McHenry to a height
of 3,000 feet down the river but no houses
are near them, the people all
living in small villages on the
banks of the river. We made camp
on the McHenry near the village of
Chung-lu at 6,000 feet. For supper
we had a duck & a goose roasted & stuffed
with chestnuts. A few days ago we had one of
the blue cranes roasted & stuffed & the meat
was very fine flavored & principally calling
duck or goose in flavor.

yellow sweetish pulp like a miniature
custard apple. The fruit is supposed
to produce gouts by the Chinese. Lin
caravan mules are a very gentle but
never weary. The mules call
themselves at night often in a loud voice
using notes like those for calling chickens.
The mules come from all directions
*muzzling for the food which is sent
for them. I was surprised to find
so many farms in such an apparently
impossible mountain country. On the steep
vertical hillsides were cornfields & millet.
The houses were built on little leveled bits
of land just large enough to accommodate
them. I should say that in 3 or 4 years
all the soil of these vertical farms would
be washed into the creek below.
However I saw few deserted fields, the
cultivation being all of recent date.
Burning trees where new land was being
cleared were seen in places. Old charcoal
kilns were seen in several spots. The
village was much of this coal. Sa-mi-lo
(H) There was dark last night when
we arrived that our traps could be set

vertical

(15) We remained camped today at Chung-lu. The traps captured one mouse & Microtus. We took Pachyura & Springer norvegicus 3. (small) + 1 Microtus reine. I went monkey hunting with a local guide. We crossed the river in two dugouts lashed together + then we climbed up the creek about 3 miles thru oak forests. The monkeys they said were feeding on acorns. They described the monkeys as large ones with short tails which come daily to rob the maize fields in the fall. We saw no trace of them however. The Naibong valley is much narrower than the Yangtze & the river is about half the width of that. It is a deep one with olive colored water like the Yangtze. The sides are alluvial clay with some red sandstone in places. No limestone or granite was seen. The boulders near the river are chiefly brown + yellow sandstone with an odd granite + porphyry mixed in. The Hsiao natives grow cotton & the women gin it + spin the fiber into balls of white thread. These women wear blue trousers like Chinese & have large

terrace of the same material. The valley
of the Mekong is widely terraced into
rice fields. At this season wheat &
peas were ^{growing} in the rice stubble.

(10) English Ivy ~~is everywhere~~ ^{grows} everywhere
in the country along ditches & road banks.
The English Walnut is also everywhere
& nuts lay drying on the roof everywhere.
Both of these plants are of Chinese origin
doubtless. We broke camp early & travelled
down the river. The weather was clear & bright
like that of yesterday & for the past week.
Our catch today was 2 *Microtus*, (one
long-tailed & several *Microtus* *irre*).

On some rice terraces I saw a flock of 50 ducks
mallards & scaup ducks feeding on the peas
which are planted for fertilization. No cranes have
been seen in the Mekong yet. In some

places the sides of the valley are terraced
for a mile wide, the terraces being only
narrow, only 2 or 3 yds wide. This must
have required many years of labor. The slopes
of the terrace is faced by grass, rock never
being in place here as in Peru. The houses in
the valley are all mud-walled with roofs
of shingles with hold down by rocks.

We camped at Hsiao-tien (Little
200 Plain) high above the river
some 2000 feet. There is a deep ravine
here with a heavy forest of oaks etc. &
a stream. The soil is here dark
red clay mixed with red shale from
which it is derived. A clump of
bananas were growing here, the
first we have seen. Their leaves were
only slightly frost-bitten. I saw
one *Carpenter* near the bananas & a
Cinnamon pheasant.

(17) The night was warmer than any
other we have had this month, no
frost fell. This place is 6500 feet alt.
but is a warm spot among the hills
as evidenced by the banana grove. I
caught 2 or 3 new rodents, a large
white bellied rat, a large fulvous bellied
Springer, & a black Micromys. There
were *Microtus* *lineatus* & 3 species (all)
with traps also. The ravine here is deep
& filled by borderwood trees, laurels, chiefly
all with green leaves. The hills are pine
& oak clad, white pine was seen near
the village with common *Myrica*.

Our way led down hill & then over
across the Mueang 199
The day was not cold early but
soon it was quite too warm
Villages appeared along the bank
at 2 or 3 mile intervals. The children
started as we passed by many of the
children were quite nude & all very
ragged & dirty. I saw 4 turkeys in
hedges. Rice fields in narrow
terraces occupied the available
land near the villages. I got far
ahead & waited at noon but no one
came so I returned at 3 P.M. &
found the camp 2 hrs back near
the river bank. Owing to the narrow
road & our large packs much of the
way had to be cut & in a few places
the loads carried around projecting
rocks.

(19) A frost occurred last night which was
clear & the day bright & warm from 10 AM
to 4 P.M. We took supper at the river side
near some huts where we secured supplies
of oranges from several groups of trees. The
weather was bladdery hot. These trees indicate
that frost is never heavy here.

We made camp high above the village
196 at the village of Hsiao-ta which
is situated at the upper limit of a long
series of rice terraces which extend down
1,000 feet to the river margin. The other
side across the way is covered by a patch-
work of fields up to 2,000 feet above the
river. Above the fields ^{or} behind other ridges
could be seen the snow-capped ridges of the
mountain. Between the divide, our camp
was situated on a small level place on
the road covered with trees & bushes.

19 The night at Hsiao-ta was cool &
pleasant. No traps were set. The village
sent us a guard of 4 men with arms and
guns & cross-bows exactly like those of the previous
nights. I have seen no rocks in place
either on road cuts or in the landscape.
The whole valley is a gravel or alluvial deposit
of red clay & shale chiefly. For the last few
days the road has ^{run} ~~followed~~ high up on the
side 1,000 feet above the river which flows in a
deep trough without level land, the cultivation
being limited to vertical farms. The appearance
of the landscape is that of fall rather than
winter. The trees, oaks, walnuts & willows

being clothed with yellow & brown foliage. & the other trees, largely ^{more} dense being in green foliage. The people here are Manchians by Honio's map. Very few are seen with guns ^{like} the Mosos but many carry cross-bows & all a broad bladed sword with a truncate tip. At

noon we reached an elevated plain with 2 villages on its edges both called Tzu-tien (Stone-step) Here there is a small army post & a 2nd class Mandarin.

We camped on the parade grounds & which overlooked the rice fields which occupied the whole plain. Stacks of hay were here piled up in the roundest trees which is the common method of keeping hay out of reach of stock.

Elevation about 6000 feet, 1000 feet above the river like our last night's camp.

(20) The shortest day in the year is at this latitude not very short. Daylight extends from 6:30 AM to 6 PM. The days being quite equal round the year round. Sun rise is 7:30 & sunset 5 PM.

Walnut trees are the commonest ~~kind~~
198 trees along the road. ~~and~~ about
houses. Some of them are giants. I saw
several yesterday 6 feet in diameter ~~and~~
through ~~the~~ ~~base~~ of trunk. One of the trees, which
is now pretty but of color is a
ash colored tree which the leaves of
which are now bright crimson or even
scarlet in some. These trees are scattered
so that their color effect amidst the
yellow oak leaves is slight. Two traps
were set last night as the caravan
did not arrive until dark owing to
the necessity of lifting loads then ~~on~~
rocky places or cutting down the
steep overhanging banks where the
trail was narrow. Our progress in
this valley is very slow, not more than
3-6 horizontal miles owing to the
deep lateral gorges to be crossed with
constant up & down nature of the trail.
The river is bordered by cliffs & steep
hillsides so that travel is not possible
here.

(21) We remained camped at
a small lateral creek where forests
of hardwoods made good tapping

Our camp was situated in a grove
of tall slender pines on a small 197
promontory above the creek which
the road follows after leaving the Mekong
River. We are here some 4 hours travel
from the river & 8000 feet in altitude.
I caught a new fulvous spiny rat
somewhat like the Tibetan species.
Also 4 Micromys, 6 Apodemus of
small size, 3 Sorex (short tld) 1 Sorex
(long tld) I caught a silver mole several
Apodemus & Sorex. It went out
hunting down the creek & returned
with a goral which he found in
company with 3 others high up on a
steep pinched Mt. Muntjac are
also said to occur here but no musk
or other game. The day was clear & cool
up to noon. The stomach of the goral
contained herbs & twigs only. In
the afternoon I found a winter wren
& a cheebie in the traps. The trap
shot several days ago contained the
hair & bones of rodents in its stomach,
apparently Microtus.

(22) We remained in camp again today but our catch of small mammals was not up to anticipation. There were numerous fulvous spiny rats or Meriones. 4 Sitala moles however were caught & several Apodemus & one Microtus. I went out with ~~Holanga~~ Holanga & the dogs goral hunting but we saw nothing were shot one yesterday. There was some dung on the cliffs & a few tracks but no evidence of any other game mammal. The cliffs here were of pinkish-red sandstone horizontally bedded. The sidehills were clothed in live oak trees & pine without underbrush & dry stony ground. The dogs were quite uneducated & would follow no tracks. When we rolled large stones down the water-side to start the game the dogs got excited at the noise made by the rocks but otherwise showed no interest.

(23) Camp was broken early & we moved up the valley. A little way beyond camp the country became well forested. Heavy

Large yellow trees were seen some
having a diameter of 6 feet in trunk
bark. They have quite an resemblance
to redwoods but the wood is white.
I saw no cones or berries on them.
The undergrowth brush was chiefly
cane. Oak & Laurel were the chief
forest trees. Muzzling cold with ice in
the road. We made camp on
a small creek at noon after getting
over the pass which was above me.

(24) Christmas was celebrated today
as we remained in camp &
having secured another new mouse,
a small bodied ~~chase~~ ochraceous
one with a very long black tail. For
dinner we had two roasted mallards
stuffed with chestnuts, rock tails made of
oranges, Chinese gin & sugar, a
chocolate cake & cocoa. Our traps
netted many rodents, *Apodemus* *gracilis*
longtailed, & small, *Epinus* & *Microtus*
(alpine), *Arvicola* one of the new genus
we reported of large muntjays in
corn field 10 li away. There are reports
for but found none when we arrived at

the field. The day was bright but un-
early at noon. Altitude about 2000 feet **201**
The climate here is like that of Tibet &
described by Sven Hedin; the nights are
bitter cold & the midday hot with in
the sun & cold in the shade

(25) We broke camp at 8 A.M. in
the bitter frost & continued our
way. The route crossed a series of
ridges with cultivated valleys & villages.
At 5 P.M. we reached a large village
town, Fa-chen-mi (Chicken Crown)
situated in a deep narrow valley
without much cultivation. The town
is supported by a salt well which
supplies the whole country northward
as far as Lichiang. The view of the
Mekong-Salween divide today was a
absolutely level range ~~like~~ as solid
as a wall with a ~~p~~ mantle of snow on the
summit. No peaks or pines were visible
on the skyline. Our traps caught a Silver
mole, a short tailed Sorex & a gray Cuvierian
but no more of the Oldracous mouse.

(26) The camp was made
last night & cold & stormy.
Our catch produced another marmot,
mouse, a golden *Ypodromus*, a
long-tailed *Shrew*, *yellow* *rodent*,
Microtus & small *Agouti*.
The route followed a mountain
stream thru forested country very
narrow & cold. Ice lined the
creek & in places covered the road.
The pass had an altitude of 12500 feet (Barometer)
making it very slippery. We met
many salt caravans, both junks
& pack animals carrying great
blocks of salt away from Sa-chen-um.
The road is ~~poor~~ paved with blocks
of stone like the regulation main
Chinese roads. The forest growth
was chiefly *Pinus* *mammosa* white
pine & hemlock, *Spice* *fir*.
The undergrowth was a luxuriant
growth of *brambles*, *Os* etc.
We made camp in the forest on the road at
noon & spent the P.M. skinning mammals.

We stopped for dinner on the creek margin
at Pei-te-spring (North flat field). It
clouded up & began raining on the ridges
bounding the valley but we travelled on
& stopped at dark in a mountain room
3 hrs. from the village. We pitched camp
in a grove of pines but had no time
to set our traps before darkness fell.
The approach to Pei-te-spring is quite
picturesque leading down a broad ~~road~~ ^{ravine}
to some water mills (flour mills) at
the edge of the village. High above and
left our sharp peaked hill sits a white
temple apparently held there by ^{clans}
at only. We bought oranges, pears &
matters in the market for our table &
the mafus bought beans for their
mules & rice for their own larder
as well as pork.

(28) In the morning the whole
landscape was a white mantle
of snow, the trees & bushes being
laden with it as there was no

(27) Altitude of camp at least ~~10,000~~ ^{9,000} feet.
The night was cold & clear. The forest
consisted of pine with a heavy growth of cane
or bamboo. The traps netted: 1 *Sorex*, 1 *Thomomys*
pubescens Sherm, the only one taken outside. *Arctomys*
mont. 3 large *Apodemus* & several smaller
species. The route led over the mts & down
a small stream to a large round valley
filled with villages. The largest is ^{Pei} ~~Pei~~
a ~~spring~~ ^{place} has a P.O. The altitude on
Davis' map for this place is ^{8,000} ~~10,000~~ feet
~~but this must be a mistake~~ and there
are many rice fields here & it is not
above 8,000 feet surely. The road near the
town was busy with natives carrying
produce to market. Turnip, chicken,
flour, vegetables, etc. Yesterday the
natives fed some of brown sugar to the
mules. This is a regular custom with
them but salt seems never to be given
to animals here. One of the mules became
sick & they bled it by cutting the roof
of the mouth. They also leeches or bled
the hoofs. One of the mules died on the 24th
but no definite disease was the cause.

only a stark night the ~~the~~
the ammunition going astray with little
falling behind the caravan &
losing the way I remained in the valley
until 1 P.M. where the soldiers returned
& showed me the way. As we were
leaving the valley at 2 P.M. we saw
near the creek a party of 20 women
bathe in some rocky pools of standing
water. They were nude & sat in
the water for at least an hour with
their children crowded together like
sardines. The water in the creek
has ice in it in shady places but
the sun & moon's quite warm
here. These are the first people I have
seen bathing, the dirty appearance
of most of them gives the impression
that they ~~were~~ were quite innocent of
water or soap. They were some
200 yds from the road & paid no
heed to us on the road. In one of
the small villages near the soldiers
for up to the old men brought tea and
Chinese wine or gin which they

wind with the storm. The morning
haze was brought by clouds &
the reflection from the snow was
very trying to the eyes. Our route
led up a steep mountain to a
pass 1200 feet high where we
arrived at noon. In some places
the road was cut down in gullies
5 feet deep & there were roofs over
by many clad larches so that we
had to travel in a sort of tunnel.
The tree growth at the pass was
chiefly fir & Rhododendrons.
Below the pass the road valley
filled with villages spread out.
This place is known as Kuan-ho-tai
on Davis map it is Chwang-mai.
We made camp in the valley near
the village.

(29) The fields of rice stubble were alive
with water-birds in the morning.
There were flocks of blue-gray cranes,
glossy black & white storks, buffy green
mallards & scamp ducks. I bagged

later passed around for ~~us~~ to keep. They
also offered me tobacco & a pipe & were
very friendly. A few miles further
on we met Li-wa returning
with the mule. I mounted &
rode on for camp. Every lot of
laden women or men my follow-
ers asked about the camp. At
dark we reached the head of the
pass where a farmer's hut was
situated. The men entered & I
afterward. The man offered us
rice & vegetables which the men
eat & then he supplied us with
pitch pine torch & he bravely
lighted our way for a mile down
the rough rock paved road
which descended at a steep angle.
He then returned with his boy
without a light giving us the torch.
He did this all without taking any
reward & was hospitality itself.

He apparently was one of the ^{Nomadic} tribes
of the whole line in that region &
Tali-fu. The Chinese however are
equally hospitable but more curious
& harassing. We continued
our way thru the darkness the
sledges leading with the torch
& Li a behind driving the mules
The camp was reached at

8:30 situated far down the valley
on a small flat near the road
in a pine forest. The traps set
at Chiang wei netted many
Mice & Spiny (small) but
only 1 Silver mole (Yangtze)

(30) The day was spent in camp ^{the}
skinning of the mammals caught several
days ago 38 of which had accumulated
The rob to go to the town of Chuan
Chuan Chou for medical treatment for
his lungs which have been subject to
blood stained expectoration,

(31) The traps set at Yang-tsen caught Microtus irae, Microtus + Epinus (small). We broke camp early + travelled down the river + on to a narrow valley of rice fields with the village on one side of it. The pass was a low one only 9000 ft. high + the ascent gradual thru pine, oak & bamboo undergrowth. We reached the town of Chien-Chuan Chou at 2 P.M. The town is surrounded by a rectangular wall of granite, well built + in good preservation. Our camp was pitched in front of a temple outside the walls in the rice fields. Below the town about 5 miles there is a large circular lake about 4 miles in diameter. We hunted waterfowl here in the late P.M. & shot 9 harlequin geese + one mallard. We saw many terns, gulls, blue herons + white winged bitterns. The night was clear + frosty, with a half moon.

Jan. 1] Our New Year was celebrated with a dinner of roast duck + Chinese wine + orange cocktails. The day was surprised in travelling from

Chien - Chuan Chon to Mui - Bai
in the valley of Tai-fu - Lake - On
our way over we met with many
waterfowl on the rice fields of Chien
Chuan Chon. There were 2 new kinds
of geese, a large whitish one like the
Imperial goose, one of which we shot for
smaller gray species. Flocks of cranes
were seen + I shot 2 with one shot of
the 25 Savage out of a flock of 8. They
are Herons-like cranes, smaller than
those shot on the Yangtze & with white
cheeks + sides of head. From the
lake plain the peaks of the Sun
mtn. stand out distinctly as well
as the one further north across the
Yangtze. Part evening at sunset
these mtn peaks were filled a beautiful
amethyst by the setting sun. After
leaving the valley we entered the hill
crossed them from forest over a low
divide of 9000 feet & made camp
on the other side near the foot of the
slope near Mui - Bai village. The
formation of this range is gray lime
stone, the first we have met with since
leaving the Mekong valley & its
volcanic which are all sandstone, shale
or igneous rocks.

(2) Our camp in the ravine above Nui Kai was quite warm without heavy frost.

~~We~~ caught in the traps 2 new species one like *Eprymys* (small) in appearance but naked ears + white soled feet, the other a small light gray *Crocidura* with a shortish tail. Most of the mice were *Microtus* virne & one *Apodemus* (large kind). During the day I shot 2 *Tupias* in roadside hedges + saw one red bellied squirrel on a tree. I shot 6 pigeons a gray one with speckled throat band + reddish wing coverts. They occurred in small flocks in the rice fields. We saw water fowl only in one place at noon.

There were several flocks of *Himantopus*, many tawny geese + small white gulls in flooded rice fields. A few blue herons, + gray black storks were seen, also jack snipes on stream margins. A common bird here is the black crested *Mimus* which is often seen sitting on houses + ~~rocks~~ ^{rocks} ~~caribon~~ ^{caribon} like our ~~own~~ ^{own} bird. Another ^{*Mimus*} which is common is the plum colored yellow billed species like that introduced in Hawaii.

The commonest bird of all is the black
& white magpie & the ravens which are
everywhere in fields. We shot 3 or 4 of the
ducks in a pond near our camp at
Sanheitzen. On the road we met a party
of Tibetans. There were 4 men & several
women. The men bowed very graciously
before us. They wore red woolen ~~trousers~~
+ great leather boots. One carried a bundle
+ a small + silly peaked hat of small size.
The women carried packs on their backs
+ wore the same sort of boots &
shouldered along stoically. We passed
at 4 P.M. through another pass or low
broken one, treeless & dry & denuded
with the brick red soil showing in many
places. It was a deforested area in which
cultivation was once prevalent. The taliafer
range could be seen all day snow covered
for half its height now when in September
it was snowless. At 4:30 we passed
through a village where the people were
assembled on a large market day with
the hum of voices at this late hour. At the
entrance of the main street ramp
erected a great wall of solid granite to keep

Out evil spirits. Most of the streets
114 in Chinese towns are very crooked
as a protection against devils which
travel only in a straight line. I have
seen these spirit walls in front of houses
& even temples. The better houses
here are rounder round bridges coated by
white plaster on which is worked a
brick pattern in a row with figures of
animals or Greek designs near the gables.

- ② We made camp at a dry slope
of a ravine just above a village. ^{High windy & cold,}
- ③ Our road followed down the ravine
then the village & then along a large
canal which carried the waters of a
stream down a canyon & on to a large
plain at head of Tchi-fu lake. At the
mouth of the canyon a hot spring
was seen in the rice fields with steam
rising from it. Several women were
washing clothes here & some men
were bathing farther down in the
warm water. The road followed the
banks of the canal wherever here
high above the rice fields & could
be traced from the plain. No
water fowl were seen in the
fields. We stopped for tea in sight of

the head of Tali for Lake. Arriving
afternoon we reached the large ~~1~~ ¹³ Dragon
Spring with a flat field & trees
which we had seen on our way out.
Here we made camp at the roadside.
(4) Our traps caught Microtus reine
Spring (small) Spring (gray ^{honey} ~~honey~~)
& Bachyura. Several Red-bellied
squirrels were seen here & Robby A.
At daylight we went
in the field near the lake. I
went out in a boat with a fisherman
& got 8 geese. Two of them I shot
the very chance with No. 8! The other
men shot with 4 & 6. I saw several
& shot one green winged. Many
small grebes were seen also black
cormorants & small white gulls.
A flock of temonelle cranes were also
seen. The geese were not wild
all of them being secured by ~~putting~~ ^{putting}
the boat to them & shooting as they
rose above the water. Our camping
place is known as the Dragon Spring
& has a shrine erected near its issue. It
comes forth under limestone rocks

which were bright green. A few
tawny geese + ~~demersell~~ ^{cranes} **111**
were ~~seen~~ in the fields. We
stopped at 11 AM - for a rest
in the shade of a large tree in
full foliage which seemed a
fig of sorts. Most of the people
with ~~rondeviere~~ Minchia with
some ~~chinasas~~ + one party of
Tibetan riding small stocky
horses. The day was windy
specially so at Tali where it
blew strong from the mountain
toward the lake. The Tali range
had a light sprinkling of snow
on it down to the 10,000 foot level
but nowhere did we see solid
white fields. When we arrived
at the town we entered by the
north gate + made camp at
dark in a vacant temple in
the extreme northwest corner of the

112 ^{as} large brook + forms an ^{irrigation} stream for the field. When we
passed later in September the trees
(crenate, oaks etc) were green ~~and~~
foliage but now they are bare.
A tree is just blooming, a pink
flowered plum tree but the flowers
are long + tubular + not much like the
white plum blossoms of our fruit trees.
The leaves are developed already + quite
cherry-like. This is our first evidence
of Spring.

⑤ The night was fairly comfortable
without evident frost. The traps
caught more *Pachyura* *Microtus* +
a large white bellied rat allied to
Epinus. We broke camp + travelled
into Tali-fu. The day was clear +
warm + many travellers were
on the road going north. The rice
fields were brown with stubble
except those planted to Soybeans.

walls. The wall is in good preservation & some 30 feet high with notches for guns & staves for gun carriages. Before

dinner we called on Evans of the B.A.T. Co & found him preparing to leave in a few days on one of his selling trips south & west to Teng Yen. One temple was of the usual pattern having a square court walled in with an altar & verandah facing out & ~~side~~ rooms on the side. On the gables were a fish at each one with upturned tail, the mouth grasping the peak of the gable.

This is the commonest sort of temple architecture.

⑥ The day was spent collecting

our outfit left at Evans bodega.
Hanna came in while we were
there. + gave us a full account
of the European war since
our departure